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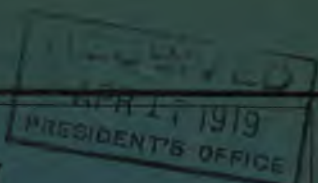
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# Bulletin of The Industrial Commission of Ohio

VOL. V

COLUMBUS, OHIO, NOVEMBER 8, 1918

No. 2

DEPARTMENT OF INVESTIGATION AND STATISTICS  
REPORT No. 36

## Statistics of Mines and Quarries in Ohio 1917



THE INDUSTRIAL COMMISSION OF OHIO

T. J. DUFFY, Chairman  
J. D. CLARK

HERBERT L. ELIOT  
ROBERT S. HAYES, Secretary

GEORGE F. MILES, Chief Statistician.  
W. P. HAYNES, Assistant Statistician

**REPORTS PUBLISHED BY THE DEPARTMENT OF INVESTIGATION AND STATISTICS OF THE INDUSTRIAL COMMISSION OF OHIO.**

The Department of Investigation and Statistics of the Industrial Commission of Ohio succeeded the Bureau of Labor Statistics, September 1, 1913. The series of annual reports issued by that Bureau, therefore, terminated with the thirty-seventh annual report, for the year ending December 31, 1912. The reports of the Department of Investigation and Statistics are issued at irregular intervals, and are numbered consecutively, beginning with No. 1. Each number is devoted to one general subject. These reports will be furnished free upon application, postage prepaid to residents of Ohio. They will be furnished to non-residents, free, upon receipt of postage, or authorization to send same express C. O. D.

- No. 3. Statistics of Mines and Quarries in Ohio, 1913.
  - No. 5. Union Scale of Wages and Hours of Labor in Ohio on May 15, 1914.
  - No. 6. Industrial Accidents in Montgomery County, Ohio, from July 1 to December 31, 1914.
  - No. 7. Industrial Accidents in Franklin County, Ohio, from July 1 to December 31, 1914.
  - No. 8. Industrial Accidents in Cuyahoga County, Ohio, from July 1 to December 31, 1914.
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  - No. 11. Industrial Accidents in Mahoning County, Ohio, from July 1 to December 31, 1914.
  - No. 12. Industrial Accidents in Summit County, Ohio, from July 1 to December 31, 1914.
  - No. 13. Industrial Accidents in Stark County, Ohio, from July 1 to December 31, 1914.
  - No. 15. Work of the Free Labor Exchanges of Ohio, for the Year Ending June 30, 1915.
  - No. 17. Inspection of Workshops, Factories and Public Buildings in Ohio, September 1, 1913, to December 31, 1914.
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  - No. 19. Statistics of Mines and Quarries in Ohio, 1914.
  - No. 20. Union Scale of Wages and Hours of Labor in Ohio on May 15, 1915.
  - No. 22. Report on Employers Carrying Self-Insurance as Provided Under Section 22 of The Workmen's Compensation Act.
  - No. 25. Statistics of Mines and Quarries in Ohio in 1915.
  - No. 27. Work of the Free Labor Exchanges in Ohio for the Year Ending June 30, 1916.
  - No. 28. Rates of Wages, Hours of Labor and Fluctuation of Employment in Ohio for the Year Ending December 31, 1915.
  - No. 29. Infections Following Industrial Accidents in Ohio.
  - No. 30. Union Scale of Wages and Hours of Labor in Ohio on May 15, 1916.
  - No. 31. Statistics of Mines and Quarries in Ohio in 1916.
  - No. 32. Preliminary Survey of Labor Camps in Ohio, 1917.
  - No. 33. Union Scale of Wages and Hours of Labor in Ohio, May 15, 1917.
  - No. 34. Work of the Free Labor Exchanges of Ohio for the Year Ending June 30, 1917.
  - No. 35. Directory of Ohio Manufacturers, 1918.
  - No. 36. Statistics of Mines and Quarries in Ohio, 1917.
- Nos. 1-2-4-14-16-21-23-24-26 — (Supply exhausted):

THE INDUSTRIAL COMMISSION  
OF OHIO

DEPARTMENT OF  
INVESTIGATION AND STATISTICS  
REPORT No. 36

STATISTICS  
OF  
MINES and QUARRIES  
IN OHIO  

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1917



COLUMBUS, OHIO:  
THE F. J. HEER PRINTING CO.  
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## PREFACE

The Department of Investigation and Statistics presents in this report data on production, number of employes, wage payments, hours of labor and accidents in the mines and quarries of Ohio for the year ending December 31, 1917. Coal, fire clay and gypsum mines and limestone and sandstone quarries are each discussed in separate sections.

All facts herein set forth were secured from schedules furnished by the owners or operators of these mines and quarries, except the data relating to accidents in coal mines which was obtained from files carried by the Division of Mine Inspection and the Actuarial Division of the Industrial Commisison.

Wages for ~~600,382~~<sup>629,666</sup> employes and payrolls aggregating \$51,183,752 are shown in this report.

Miss Florence E. Kinnison had charge of the examination and tabulation of the returns made by the employers of the State and the report was prepared by Miss Carrie E. Reid.

GEORGE F. MILES,  
*Chief Statistician.*

Columbus, Ohio, November 8, 1918.



## COAL MINES

### PRODUCTION

Coal production reported to the Department of Investigation and Statistics, Ohio Industrial Commission, for the year ending December 31, 1917, totals 41,677,986 tons. (a) This was 7.6 per cent of the total bituminous production for the United States, 551,790,563 tons, as announced by the United States Geological Survey, which ranks Ohio as the fourth state in quantity of such coal mined.

The State exceeded its 1916 production by one-fifth (20.7 per cent). The largest previous production reported since 1889 occurred in 1913. The output in that year was 36,285,468 tons, or 5,392,518 tons less than the total production during 1917.

Compared with certain previous five-year production averages, increases are shown as follows:

<i>Period.</i>	<i>Per cent increase.</i>
1912-1916 .....	29.6
1907-1911 .....	27.4
1906-1910 .....	29.4

There are thirty coal-producing counties in Ohio. Only four of these reported decreased production since 1916. They were Guernsey, (8.5 per cent); Monroe, (31.0 per cent); Summit, (22.4 per cent), and Wayne, (22.6 per cent). Gallian and Scioto County tripled their production; Perry, Vinton and Washington County doubled their total tonnage; Athens, Carroll, Hocking and Mahoning County exceeded 50 per cent gains.

The greatest col-producing county in the State is Belmont County, which reports 11,156,626 tons, or slightly more than one-fourth of Ohio's total coal product. Athens County with 6,313,619 tons and Jefferson county with 5,742,240 tons, each produced about one-seventh of the State's total tonnage. Guernsey County was fourth in point of production, with 4,024,265 tons. In all, ten counties produced each more than 1,000,000 tons of coal during the year 1917. In 1916, there were but eight counties which did so. Arranged in the order of their relative importance, they are listed below:

---

(a) The short ton of 2,000 pounds is used throughout this report, and all figures are for total production, without regard to grade of coal mined.

1916.		1917.	
County.	Tonnage.	County.	Tonnage.
Belmont .....	10,553,088	Belmont .....	11,156,626
Jefferson .....	5,366,393	Athens .....	6,313,619
Guernsey .....	4,397,262	Jefferson .....	5,742,240
Athens .....	3,743,672	Guernsey .....	4,024,265
Tuscarawas .....	1,547,110	Perry .....	2,445,114
Hocking .....	1,435,188	Hocking .....	2,211,858
Perry .....	1,195,127	Tuscarawas .....	1,788,800
Meigs .....	1,025,036	Meigs .....	1,267,144
.....	.....	Harrison .....	1,222,561
.....	.....	Jackson .....	1,016,249

#### METHOD OF PRODUCTION

Machine mining produced 35,723,566 tons, or 85.7 per cent of the total production in 1917; pick mining, 4,728,453 tons, or 11.3 per cent; and the stripping method was used in the production of 1,225,967 tons, or the remaining 3.0 per cent. In 1916 these per cents were respectively, 91.5, 7.0 and 1.5. The larger reports from pick and stripping mines during 1917 were due, no doubt, to the opening of many small and abandoned mines, as a part of the national speed program in connection with winning the war.

Only eleven counties reported mining by the stripping method and the amounts were negligible except in Harrison and Jefferson County, where they were 23.5 per cent and 13.4 per cent of the total tonnage of the county. Eight counties—Holmes, Lawrence, Medina, Monroe, Scioto, Summit, Trumbull and Washington—reported pick-mining exclusively. The per cent of machine-mined coal in the ten counties of largest production was:—

County.	<i>Per cent total tonnage machine mined.</i>	County.	<i>Per cent total tonnage machine mined.</i>
Belmont .....	95.4	Hocking .....	89.2
Athens .....	94.3	Tuscarawas .....	64.7
Jefferson .....	82.4	Meigs .....	87.4
Guernsey .....	97.9	Harrison .....	71.8
Perry .....	81.3	Jackson .....	35.3

#### DISPOSITION OF PRODUCT.

The Department of Investigation and Statistics requires returns from coal operators as to disposition of their product under four inquiries:

## II

Used in —	Sold to —
Operation of mine	Local Trade
Manufacturing processes in connection with mine.	Shipping Trade.

The information secured for the year ending December 31, 1917, shows that—

- 752,762 tons were used in operation of mines.
- 1,610,364 tons were used in manufacturing processes in connection with mines.
- 1,325,162 tons were sold to local trade.
- 37,989,698 tons were sold to shipping trade.

In terms of per cent, approximately 5 per cent of all coal mined was used by the operators and 95 per cent offered on the market.

### MINING MACHINES.

Four hundred and four mines in Ohio used machines in their 1917 coal production. Their county distribution is shown in Table 5, page 21. They operated 1,743 machines, all but 26 of which were electrically driven. The others had compressed air for their motive power.

The number of machines in use shows an increase of 143 as compared with the preceding year and is the largest ever reported. Belmont County led with 393 machines; Jefferson, 255; Athens, 228; Guernsey, 150; Perry, 142; and Tuscarawas, 105. Almost three-fourths of all machines reported used were operated in these six counties.

The average number of tons cut per machine per day and per year shows slight increases over 1916, advancing from 100.2 tons per day to 100.5 tons and from 19,737 tons per year to 20,495 tons.

### HAULAGE METHODS.

More than one-half of the mines in Ohio, 639 of 1,154 from which returns were secured, used animals for haulage purposes. Hand haulage is practiced in 194 mines. Motors were used in 121 mines and 30 others hauled by cable. The remainder, 170 mines, used combinations of these various methods. Table 8, page 23, details this information by counties.

### CHARACTER OF OPENINGS.

Coal operators in Ohio are required to describe their mines as to character of opening as drift, slope or shaft mines. Of 1,223 mines reporting on this point—

- 942 were drift openings.
- 164 were slope openings.
- 117 were shaft openings.

### TYPES OF VENTILATION.

Approximately one-third of the coal mines in Ohio have natural ventilation, one-third use fans, and about one-half of the remaining one-third, use furnace systems. Fire baskets and exhaust steam were reported from only 53 of 1,207 mines. Fifty-five mines reported the use of two or more methods of ventilation.

Compared with 1916, there were increases as follows: in mines reporting fan ventilation, 94; reporting furnace ventilation, 62; reporting natural ventilation, 87.

### NUMBER OF EMPLOYEES.

Fifty-one thousand, two hundred and eight-six employees were reported as the average number engaged in coal mining in Ohio in 1917. One thousand, three hundred and sixty-seven, or 2.7 per cent of these, were employed in the 24 stripping mines from which reports were secured. Pick mines reported 6,923 employees, or 13.5 per cent of the total employees in the State. The majority, 42,996 miners, or 83.8 per cent, were at work in machine mines.

Compared with average numbers employed in each of the five preceding years, in pick and machine mines, the 1917 figure of 49,919 miners is—

19.9 per cent	greater than in 1916
20.5 per cent	greater than in 1915
6.3 per cent	greater than in 1914
3.1 per cent	greater than in 1913
5.7 per cent	greater than in 1912

It exceeds the average of this five-year period by 10 per cent and is the largest number reported since 1904 with but one exception—50,267 miners reported in 1908.

One-third of the thirty coal-producing counties each employed more than one thousand miners. Belmont led with 12,079; Athens was second with 7,395; Jefferson was third with 5,383. Together these three counties reported 50 per cent of all employment in this industry.

Doubling average employment since 1916 is the record of Gallia, Mahoning and Vinton County. Gains greater than one-half were reported from Carrol, Harrison, Hocking, Lawrence, Muskingum and Perry County.

The 49,919 (a) employees in coal mines were distributed by principal occupation groups as follows:

---

(a) 1,367 employees in stripping mines are not included in any table in this report except under the title, "Fluctuation of Employment".

Occupation	Number of Employees		Total
	In Pick Mines	In Machine Mines	
Pick miners .....	4,860	903	5,763
Machine runners and helpers.....	.....	3,799	3,799
Loaders (including drillers and shooters) ..	.....	23,900	23,900
Inside day hands.....	1,065	9,110	10,175
Outside day hands.....	998	5,284	6,282
Total .....	6,923	42,996	49,919

## FLUCTUATION OF EMPLOYMENT.

The average number of days worked during 1917 by pick miners in pick mines was 188; by loaders in machine mines, it was 204. The corresponding figures for 1916 were 182 days and 197 days, respectively. The irregularity of employment in these two occupations was less than at any time since 1913. Average employment in each county during 1917 is shown in Table 16, page 30, and for the State in each year since 1904, in Table 17, page 31.

## CLASSIFIED AVERAGE NUMBER OF DAYS WORKED BY 4,860 PICK MINERS IN PICK MINES.

<i>Days Worked.</i>	<i>Number of Men.</i>	<i>Per cent of Total.</i>
Less than 50.....	316	6.5
50 but under 100.....	535	11.0
100 but under 150.....	647	13.3
150 but under 200.....	724	14.9
200 but under 250.....	1,171	24.1
250 but under 300.....	1,039	21.4
300 or more.....	428	8.8

Comparison with the 1916 data on this point reveals that the proportion of men in this occupation who worked 200 or more days per year rose from 49.1 to 54.3 per cent of the total of such employes.

## CLASSIFIED AVERAGE NUMBER OF DAYS WORKED BY 23,900 LOADERS IN MACHINE MINES.

<i>Days Worked.</i>	<i>Number of Men.</i>	<i>Per cent of Total.</i>
Less than 50.....	802	3.4
50 but under 100.....	445	1.9
100 but under 150.....	1,009	4.3
150 but under 200.....	6,738	27.8
200 but under 250.....	11,344	47.6
250 but under 300.....	3,295	13.9
300 or more.....	267	1.1



Comparison with the 1916 data on this point reveals that the proportion of men in this occupation who worked 200 or more days per year rose from 54.7 to 62.6 per cent of the total of such employees.

The month of maximum employment during 1917 was December, when 51,412 employees were on the payrolls of the 1,206 coal mines reporting. Minimum employment occurred in April, when the number of employees fell to 41,584. Variation during the year was, therefore 19.1 per cent, or about one-fifth of maximum employment. In 1916, it was 26.9 per cent, or slightly more than one-fourth of that year's maximum. For county detail on this subject, consult Table 19, page 33.

#### PRODUCTION PER EMPLOYEE.

A daily average production of 3.9 tons during 1917 was reported for pick miners in pick mines; 46.1 tons for machine runners and helpers; and 7.3 tons for loaders, including drillers and shooters. The only notable increase is in the last of these figures, which is the highest reported in twenty-three years, or since 1895. The daily output of 46.1 tons for machine runners and helpers is 4.5 tons less than was reported for 1916, but is a slight increase over both their previous five and ten-year average daily production.

Pick miners in pick mines exceeded their average annual tonnage for 1916 by 74 tons; for 1915 by 142 tons; and for 1914, by 225 tons.

#### WAGE AND SALARY PAYMENTS.

Wage and salary payments in Ohio coal mines during 1917 totaled \$44,942,666. Of this amount—

\$44,245,175 was paid to wage earners.  
\$697,491 was paid to office help.

Ten of the thirty coal-producing counties each had payrolls larger than \$1,000,000, and together they reported seven-eighths of the aggregate payroll in the State. In the order of their comparative importance, they were:—

<i>County.</i>	<i>Wage and Salary Payments.</i>
Belmont .....	\$10,998,643
Athens .....	6,495,686
Jefferson .....	5,921,434
Guernsey .....	4,180,836
Perry .....	2,790,255
Hocking .....	2,272,530
Tuscarawas .....	2,235,511
Meigs .....	1,640,016
Jackson .....	1,448,212
Harrison .....	1,223,248

Classified weekly wages were reported by counties for 52,303 employes in and around coal mines, and are shown in full in Table 23, page 37. 1.2 per cent of these employes received less than \$10 per week; 5.5 per cent received \$10-\$15 per week; 12.1 per cent received \$15-\$18 per week; 38.1 per cent received \$18-\$25 per week; 33.0 per cent received \$25-\$35 per week; and 10.2 per cent received \$35 or more per week.

In cumulative statement, the same wage facts appear as below:

<i>Amount.</i>	<i>Per Cent Total Employes.</i>
Earning less than \$15 per week.....	6.6
Earning less than \$18 per week.....	18.8
Earning less than \$25 per week.....	56.8
Earning less than \$35 per week.....	89.8

Classified weekly wages were reported also by occupations for the 52,303 employes in Ohio's coal mines in 1917. Results for 51,759 wage earners are summarized from Table 24, page 38:

Occupation.	Per cent earning weekly.				
	Under \$15.	\$15-\$18.	\$18-25.	\$25-35.	\$35 and over.
Pick miners .....	11.9	18.5	29.4	28.1	12.0
Machine runners and helpers.....	1.1	2.4	18.9	39.3	38.2
Loaders, drillers and shooters.....	5.4	11.6	45.2	29.6	8.2
Other inside employes.....	6.6	10.7	36.1	40.8	5.8
Outside employes .....	7.9	15.2	34.4	35.4	7.0

Salaries paid to male and female office help show approximately one man in twenty and one woman in seven earning less than \$10 per week. Twice as large a percentage of men as of women earn \$25 or more per week—30 per cent in the former case and only 15 per cent in the latter.

#### NUMBER OF FATAL ACCIDENTS IN COAL MINES.

The Department of Investigation and Statistics does not now inquire into the number, nature nor cost of coal mine accidents in the State.

Fatalities in all mines are reported to the Chief Mine Inspector, who tabulated 113 such accidents during the calendar year 1917. Thirty-two lives were lost in Belmont County, eighteen in Jefferson County, fifteen in Guernsey County and twelve in Athens County. Fatalities only are reported to this official.

The Actuarial Division of the Ohio Industrial Commission secures information on accidents of all types which occur in mines employing five or more persons and appearing, therefore, in the records of firms insured under the Workmen's Compensation Act. This annual has formerly carried a full discussion of the causes and character of all these classes of accidents, but no data other than that pertaining to fatalities could be made available by that Division for this report.

Seventy-seven death claims were passed upon by the Industrial Commission in 1917, two cases were partially closed, and eighteen others were still pending before them at the close of business on December 31, 1917. The total awards (medical and hospital bills included) in the seventy-nine cases were \$246,372.86. Except in the two open cases where foreign dependents are involved and future awards may be made, this sum (\$246,372.86) represents the entire cost to the Compensation Fund of these deaths. Their time cost to the coal mining industry cannot be computed as the Department of Investigation and Statistics has no data on the ages of the workmen who suffered these fatalities. For the counties in which these accidents occurred, see Table 25, page 39

#### FREQUENCY OF FATAL ACCIDENTS.

It is elsewhere stated in this report that the total 1917 coal production was 41,677,986 tons, and the number of employes total 53,670 persons. The frequency of the 113 fatalities reported to the Chief Mine Inspector was, therefore, one to every 475 men employed, and to every 368,832 tons of coal mined. The Mine Inspector's figure is given preference in computing these proportions because it represents accidents actually occurring in the same calendar period as did the employment.

This is a better record than the mining industry made during the previous year, where one man in every 385 men engaged in it was killed or one life lost in the production of every 319,690 tons of coal.

#### CAUSES OF FATAL ACCIDENTS.

The ninety-nine fatal accident cases before the Industrial Commission during this period were distributed by cause as follows:

<i>Cause.</i>	<i>Number of Deaths.</i>
Falls of stone, slate or coal.....	55
Cars, motors and cages.....	30
Explosions .....	7
Electricity .....	2
Strain from lifting.....	2
Kicked by animal.....	1
Falling and stumbling.....	2
Total .....	99

About five-sixths of these fatal accidents were ascribed to the first two causes, somewhat more than one-half of them being due to falls of stone, slate or coal and slightly less than one-third to mine cars, motors and cages. Fifteen of the thirty coal-producing counties reported fatal accidents during 1917. Thirteen miners in Belmont County, nine in Jefferson County, eight in Athens County, and eight in Guernsey County lost their lives by falls of stone, slate or coal. Ten miners in Belmont County were struck and killed by mine cars and motors. Belmont County's proportion of total number of coal mine employes and of total number of fatal accidents was approximately one-fourth in each case. A full statement of the causes to which fatal accidents in each county were attributed is given in Table 27, page 41.

TABLE I. COAL PRODUCTION FOR THE YEAR ENDING DECEMBER 31, 1917, COMPARED WITH THE YEAR ENDING DECEMBER 31, 1916. BY COUNTIES.

County.	Tons Produced.		Gain.		Loss.	
	1916.	1917.	Tons.	Percent.	Tons.	Percent.
Athens .....	3,743,672	6,313,619	2,569,947	68.6	.....	.....
Belmont .....	10,553,088	11,156,626	603,538	5.7	.....	.....
Carroll .....	326,714	487,092	160,378	49.1	.....	.....
Columbiana .....	518,862	616,925	98,063	18.9	.....	.....
Coshocton .....	316,045	371,785	55,740	17.6	.....	.....
Gallia .....	6,883	28,270	21,387	310.7	.....	.....
Guernsey .....	4,397,262	4,024,265	.....	.....	372,997	8.5
Harrison .....	990,641	1,222,561	231,920	23.4	.....	.....
Hocking .....	1,435,188	2,211,858	776,670	54.1	.....	.....
Holmes .....	14,826	20,144	5,318	35.9	.....	.....
Jackson .....	727,999	1,016,249	288,250	39.6	.....	.....
Jefferson .....	5,366,393	5,742,240	375,847	7.0	.....	.....
Lawrence .....	166,261	241,333	75,072	45.2	.....	.....
Mahoning .....	28,842	50,537	21,695	75.2	.....	.....
Medina .....	9,205	10,088	883	9.6	.....	.....
Meigs .....	1,025,036	1,267,144	242,108	23.6	.....	.....
Monroe .....	988	682	.....	.....	306	31.0
Morgan .....	258,721	326,008	67,287	26.0	.....	.....
Muskingum .....	396,289	541,261	144,972	36.6	.....	.....
Noble .....	864,695	918,519	53,824	6.2	.....	.....
Perry .....	1,195,127	2,445,114	1,249,987	104.6	.....	.....
Portage .....	69,432	92,439	23,007	33.1	.....	.....
Scioto .....	617	2,608	1,991	322.7	.....	.....
Stark .....	335,487	471,034	135,547	40.4	.....	.....
Summit .....	38,260	29,680	.....	.....	8,580	22.4
Trumbull .....	1,116	1,266	150	13.4	.....	.....
Tuscarawas .....	1,547,110	1,788,800	241,690	15.6	.....	.....
Vinton .....	106,376	212,940	106,564	100.2	.....	.....
Washington .....	421	1,137	716	170.0	.....	.....
Wayne .....	84,996	65,762	.....	.....	19,234	22.6
State .....	34,526,552	41,677,986	.....	.....	.....	.....
Net Gain—	.....	.....	.....	.....	.....	.....
Tons .....	.....	.....	7,151,434	.....	.....	.....
Per cent .....	.....	.....	.....	20.7	.....	.....

TABLE 2. COAL PRODUCTION FOR THE YEAR ENDING DECEMBER 31, 1917, CLASSIFIED ACCORDING TO METHOD OF PRODUCTION. BY COUNTIES.

County.	Tons.				Per Cent.		
	Pick Mined.	Machine Mined.	Stripped.	Total.	Pick Mined.	Machine Mined.	Stripped.
Athens .....	356,973	5,966,446	200	6,313,619	4.7	94.3	(a)
Belmont .....	516,709	10,639,917		11,156,626	4.6	95.4	
Carroll .....	165,228	320,508	1,356	487,092	33.9	65.8	.3
Columbiana .....	108,969	507,615	341	616,925	17.7	82.3	(a)
Coshocton .....	208,174	163,611		371,785	56.0	44.0	
Gallia .....	24,964	3,306		28,270	88.3	11.7	
Guernsey .....	69,847	3,988,967	15,451	4,024,265	1.7	97.9	.4
Harrison .....	58,369	877,205	286,987	1,222,561	4.8	71.8	28.5
Hocking .....	238,668	1,973,190		2,211,858	10.8	89.2	
Holmes .....	20,144			20,144	100.0		
Jackson .....	655,968	358,824	1,457	1,016,249	64.5	35.3	.2
Jefferson .....	240,914	4,733,481	767,845	5,742,240	4.2	82.4	13.4
Lawrence .....	241,333			241,333	100.0		
Mahoning .....	33,896	16,642		50,537	67.1	32.9	
Medina .....	10,088			10,088	100.0		
Meigs .....	160,129	1,107,015		1,267,144	12.6	87.4	
Monroe .....	682			682	100.0		
Morgan .....	1,160	324,848		326,008	.4	99.6	
Muskingum .....	195,690	345,171	100	541,261	36.2	63.8	(a)
Noble .....	8,822	909,697		918,519	1.0	99.0	
Perry .....	354,491	1,967,533	103,090	2,445,114	14.5	81.3	4.2
Portage .....	45,082	47,357		92,439	48.8	51.2	
Scioto .....	2,608			2,608	100.0		
Stark .....	314,231	152,001	4,802	471,034	66.7	32.3	1.0
Summit .....	29,680			29,680	100.0		
Trumbull .....	1,266			1,266	100.0		
Tuscarawas .....	586,988	1,157,474	44,338	1,788,800	32.8	64.7	2.5
Vinton .....	62,872	150,068		212,940	29.5	70.5	
Washington .....	1,137			1,137	100.0		
Wayne .....	13,072	52,690		65,762	19.9	80.1	
State .....	4,728,453	35,723,566	1,225,967	41,677,986	11.8	85.7	3.0

(a) Not computed owing to small amount mined.

TABLE 3. ANNUAL COAL PRODUCTION, CLASSIFIED ACCORDING TO MINING METHODS, 1889 TO 1917 INCLUSIVE.

(The Bureau of Mines received no reports on mining methods prior to 1889. Practically the entire product reported to it annually from 1872 to 1888 was pick mined.)

Year.	Tons.				Per Cent of Total Production.		
	Pick Mined.	Machine Mined.	Stripped.	Total.	Pick Mined.	Machine Mined.	Stripped.
1889	10,007,385	90,000		10,907,385	91.7	8.8	
1890	10,640,360	1,148,499		11,788,859	90.3	9.7	
1891	11,396,106	1,654,081		13,050,187	87.8	12.7	
1892	12,360,828	2,239,080		14,599,908	84.7	15.3	
1893	12,275,023	2,553,074		14,828,097	82.8	17.2	
1894	9,354,753	2,555,466		11,910,219	78.5	21.5	
1895	10,563,423	3,120,456		13,683,879	77.2	22.8	
1896	9,544,259	3,368,349		12,912,608	73.9	26.1	
1897	8,342,696	4,106,124		12,448,822	67.0	33.0	
1898	8,805,557	5,252,598		14,058,155	62.6	37.4	
1899	9,167,874	6,741,960		15,908,834	57.6	42.4	
1900	9,966,372	9,457,777		19,426,049	51.3	48.7	
1901	9,831,476	10,489,314		20,321,290	48.4	51.6	
1902	10,489,619	13,439,648		23,929,267	43.8	56.2	
1903	10,012,335	14,500,981		24,513,316	40.7	59.3	
1904	8,037,360	16,546,455		24,583,815	32.7	67.3	
1905	6,825,125	19,409,532		25,834,657	26.4	73.6	
1906	6,500,263	20,713,232		27,213,495	23.9	76.1	
1907	6,511,773	25,854,176		32,365,949	20.1	79.9	
1908	4,676,869	21,610,931		26,287,800	17.8	82.2	
1909	4,606,402	23,146,630		27,755,032	16.6	83.4	
1910	4,341,483	30,083,468		34,424,951	12.6	87.4	
1911	3,467,119	26,874,920		30,342,039	11.4	88.6	
1912	3,739,536	30,674,755		34,414,291	10.9	89.1	
1913	3,691,923	32,593,545		36,285,468	10.2	89.8	
1914	2,586,468	16,008,553	(a) 141,446	18,736,467	13.8	85.4	(a) 0.8
1915	2,126,670	20,192,110	291,734	(b) 22,627,046	9.4	89.3	1.3
1916	2,414,367	31,579,032	533,153	34,526,552	7.0	91.5	1.5
1917	4,728,453	35,723,566	1,225,967	41,677,986	11.3	85.7	3.0

(a) Not separately reported in previous years.

(b) Includes 16,532 tons for which the method of production was not reported.

TABLE 4—COAL PRODUCTION FOR THE YEAR ENDING DECEMBER 31, 1917, CLASSIFIED ACCORDING TO DISPOSITION OF PRODUCT. BY COUNTIES.

County.	Number of Tons.				
	Total Production.	Used in		Sold to	
		Operation of Mine.	Manufacturing Processes in Connection with Mine.	Local Trade.	Shipping Trade.
Athens .....	6,313,619	115,827	10,932	29,761	6,157,099
Belmont .....	11,156,626	126,134	692,374	144,153	10,193,965
Carroll .....	487,092	19,644	51,302	6,426	409,720
Columbiana .....	616,925	12,947	33,072	69,911	500,995
Coshocton .....	371,785	6,707	4,572	78,019	282,487
Gallia .....	28,270	368	.....	7,782	20,120
Guernsey .....	4,024,265	107,714	4,673	87,559	3,824,319
Harrison .....	1,222,561	22,834	.....	31,190	1,168,537
Hocking .....	2,211,858	30,017	34,350	15,916	2,131,575
Holmes .....	20,144	324	1,638	16,106	2,076
Jackson .....	1,016,249	46,924	83,606	44,566	841,153
Jefferson .....	5,742,240	103,192	237,586	191,142	5,210,320
Lawrence .....	241,333	1,971	40,806	23,647	174,909
Mahoning .....	50,537	494	.....	46,151	3,892
Medina .....	10,088	465	.....	9,623	.....
Meigs .....	1,267,144	15,708	52,000	56,219	1,143,217
Monroe .....	682	10	.....	672	.....
Morgan .....	326,008	8,449	.....	4,279	313,280
Muskingum .....	541,261	2,585	.....	98,518	440,158
Noble .....	918,519	15,587	.....	15,274	887,658
Perry .....	2,445,114	44,012	53,536	39,521	2,308,045
Portage .....	92,439	8,399	.....	11,352	72,688
Scioto .....	2,608	5	.....	907	1,696
Stark .....	471,034	14,485	63,922	125,773	266,854
Summit .....	29,680	1,350	.....	16,453	11,877
Trumbull .....	1,266	20	.....	1,246	.....
Tuscarawas .....	1,788,800	38,199	231,811	137,880	1,380,910
Vinton .....	212,940	5,887	14,184	6,345	186,524
Washington .....	1,137	.....	.....	1,137	.....
Wayne .....	65,762	2,504	.....	7,634	55,624
State .....	41,677,986	752,762	1,610,364	1,325,162	37,989,698

TABLE 5. MINING MACHINES—NUMBER, MOTIVE POWER, AND PRODUCTION FOR THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

County.	Number of mines in which machines are used.	Number of machines operated by		Total number of mining machines used.	Number of tons produced by		Total tons produced by mining machines.
		Electricity.	Compressed air.		Electric machines.	Compressed air machines.	
Athens .....	65	223	.....	223	5,956,446	.....	5,956,446
Belmont .....	78	392	1	393	10,637,366	2,562	10,639,917
Carroll .....	4	24	.....	24	320,508	.....	320,508
Columbiana .....	10	36	.....	36	507,615	.....	507,615
Coshocton .....	9	11	12	23	125,151	88,460	163,611
Gallia .....	1	1	.....	1	3,306	.....	3,306
Guernsey .....	26	149	1	150	3,938,843	124	3,938,967
Harrison .....	8	62	.....	62	877,205	.....	877,205
Hocking .....	49	95	.....	95	1,978,190	.....	1,978,190
Jackson .....	11	33	.....	33	358,824	.....	358,824
Jefferson .....	37	255	.....	255	4,738,481	.....	4,738,481
Mahoning .....	3	3	.....	3	16,642	.....	16,642
Meigs .....	20	84	.....	84	1,107,015	.....	1,107,015
Morgan .....	2	14	.....	14	324,848	.....	324,848
Muskingum .....	7	34	.....	34	345,171	.....	345,171
Noble .....	3	24	.....	24	909,697	.....	909,697
Perry .....	40	141	1	142	1,986,114	1,419	1,987,533
Portage .....	2	2	1	3	47,006	351	47,357
Stark .....	7	13	.....	13	152,001	.....	152,001
Tuscarawas .....	20	95	10	105	1,086,514	70,960	1,157,474
Vinton .....	6	13	.....	13	150,068	.....	150,068
Wayne .....	1	3	.....	3	52,690	.....	52,690
State .....	404	1,717	26	1,743	35,609,700	113,866	35,723,566



TABLE 6. MINING MACHINES IN USE AND AVERAGE NUMBER OF TONS OF COAL CUT PER MACHINE PER YEAR AND PER DAY, 1917 COMPARED WITH 1916. BY COUNTIES.

County.	Number of machines in use.		Average number of tons cut per machine per year.		Average number of tons cut per machine per day.	
	1916	1917	1916	1917	1916	1917
Athens .....	186	228	19,192	26,125	126.3	122.7
Belmont .....	458	393	22,819	27,074	111.9	133.4
Carroll .....	19	24	13,959	13,355	59.4	59.4
Columbiana .....	21	36	21,589	14,100	82.4	55.5
Coshocton .....	22	23	6,757	7,114	38.6	41.4
Gallia .....	1	1	1,050	3,306	.....	25.0
Guernsey .....	138	150	31,613	26,260	148.4	144.3
Harrison .....	42	62	21,339	14,148	112.9	96.2
Hocking .....	62	95	21,450	20,770	105.7	98.0
Jackson .....	43	33	9,007	10,873	43.9	51.3
Jefferson .....	234	255	20,323	18,563	95.0	88.8
Lawrence .....	1	.....	845	.....	11.6	.....
Mahoning .....	2	3	4,164	5,547	17.4	22.0
Meigs .....	81	84	12,342	13,179	57.4	61.3
Morgan .....	10	14	25,763	23,203	109.2	105.9
Muskingum .....	29	34	10,339	10,152	49.7	49.8
Noble .....	23	24	37,162	37,904	171.3	184.9
Perry .....	93	142	11,377	13,997	74.4	70.0
Portage .....	2	3	19,212	15,786	94.2	57.8
Stark .....	20	18	9,522	8,445	63.9	37.5
Tuscarawas .....	98	105	11,549	11,024	52.7	55.1
Vinton .....	9	13	9,617	11,544	62.9	50.4
Wayne .....	6	3	5,341	17,563	27.7	85.7
State .....	1,600	1,743	19,737	20,495	100.2	100.5

TABLE 7. MINING MACHINES IN USE, AND AVERAGE NUMBER OF TONS OF COAL CUT PER MACHINE PER YEAR AND PER DAY, 1904 TO 1917, INCLUSIVE.

Year.	Total Number of Mining Machines in Use.	Average Number of Tons cut per Machine per Year.	Average Number of Tons cut per Machine per Day.
1904 .....	975	16,971	99.2
1905 .....	1,146	16,588	95.9
1906 .....	1,266	16,361	94.6
1907 .....	1,396	18,520	89.9
1908 .....	1,445	14,956	95.3
1909 .....	1,395	16,593	97.0
1910 .....	1,473	20,423	101.6
1911 .....	1,542	17,429	100.2
1912 .....	1,549	19,803	100.0
1913 .....	1,653	19,718	96.7
1914 .....	1,610	9,943	98.4
1915 .....	1,443	13,978	102.0
1916 .....	1,600	19,737	100.2
1917 .....	1,743	20,495	100.5

TABLE 8. HAULAGE METHODS IN COAL MINES REPORTED IN OPERATION DURING THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

(Twenty-four Stripping mines, and one hundred and eighteen mines for which the kind of haulage was not reported, are not included in this table.)

County.	Total Number of Mines Reported Operating.	Number of Mines Having Each Specified Kind of Haulage.						
		Motor.	Cable.	Animal.	Hand.	Motor and Animal.	Cable and Animal.	Motor and Cable.
Athens .....	98	12	2	49	5	24	2	4
Belmont .....	135	29	3	55	15	31	2	.....
Carroll .....	21	2	1	14	1	.....	3	.....
Columbiana .....	31	3	2	15	4	3	3	1
Coshocton .....	46	1	4	34	5	1	1	.....
Gallia .....	25	.....	.....	11	14	.....	.....	.....
Guernsey .....	46	15	1	16	7	4	2	1
Harrison .....	39	2	2	11	19	5	.....	.....
Hocking .....	77	8	3	66	.....	9	1	.....
Holmes .....	16	.....	.....	3	13	.....	.....	.....
Jackson .....	72	3	1	50	11	5	2	.....
Jefferson .....	68	11	.....	26	11	20	.....	.....
Lawrence .....	35	.....	.....	19	15	.....	1	.....
Mahoning .....	16	.....	3	12	1	.....	.....	.....
Medina .....	3	.....	.....	3	.....	.....	.....	.....
Meigs .....	56	11	.....	33	1	5	1	.....
Monroe .....	1	.....	.....	.....	2	.....	.....	.....
Morgan .....	4	1	.....	.....	1	1	.....	.....
Muskingum .....	50	4	1	32	9	1	2	1
Noble .....	17	3	.....	3	11	.....	.....	.....
Perry .....	84	9	4	48	7	14	1	1
Portage .....	3	.....	.....	2	.....	1	.....	.....
Scioto .....	4	.....	.....	2	2	.....	.....	.....
Stark .....	66	2	1	43	20	.....	.....	.....
Summit .....	4	.....	.....	2	2	.....	.....	.....
Trumbull .....	2	.....	.....	1	1	.....	.....	.....
Tuscarawas .....	99	5	2	75	3	7	5	2
Vinton .....	26	.....	.....	15	8	8	.....	.....
Washington .....	4	.....	.....	.....	4	.....	.....	.....
Wayne .....	6	.....	.....	4	2	.....	.....	.....
State .....	1,154	121	30	639	194	134	26	10

TABLE 9. CHARACTER OF OPENINGS OF COAL MINES REPORTED  
IN OPERATION DURING THE YEAR ENDING DECEMBER 31, 1917.  
BY COUNTIES.

(Twenty-four stripping mines and forty-nine mines for which the kind of opening was not reported, are not included in this table.)

County.	Total Number of Mines Reported in Opera- tion.	Number of Mines Having Each Specified Kind of Opening.		
		Slope.	Drift.	Shaft.
Athens .....	100	66	14	20
Belmont .....	143	118	15	10
Carroll .....	22	18	4	.....
Columbiana .....	32	24	6	2
Coshocton .....	50	42	7	1
Gallia .....	29	25	2	2
Guernsey .....	49	21	11	17
Harrison .....	43	34	8	1
Hocking .....	78	76	2	.....
Holmes .....	20	19	1	.....
Jackson .....	85	66	4	15
Jefferson .....	68	57	4	7
Lawrence .....	36	32	4	.....
Mahoning .....	20	5	11	4
Medina .....	3	.....	3	.....
Meigs .....	60	56	2	2
Monroe .....	1	.....	1	.....
Morgan .....	4	3	1	.....
Muskingum .....	56	41	15	.....
Noble .....	20	14	2	4
Perry .....	84	67	12	5
Portage .....	3	.....	1	2
Scioto .....	4	4	.....	.....
Stark .....	69	43	15	11
Summit .....	4	1	.....	3
Trumbull .....	2	1	.....	1
Tuscarawas .....	101	84	15	2
Vinton .....	27	22	3	2
Washington .....	4	3	1	.....
Wayne .....	6	.....	.....	6
State .....	1,223	942	164	117

TABLE 10. VENTILATION METHODS IN COAL MINES REPORTED IN OPERATION DURING THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

(Twenty-four Stripping mines and sixty-five mines for which kind of ventilation was not reported are not included in this table.)

County.	Total Number of Mines Reported in Opera- tion.	Number of Mines Having Each Specified Kind of Ventilation.					
		Fan.	Furnace.	Fire Basket.	Exhaust Steam.	Natural.	Com- bination of Two or More of Pre- ceding Meth- ods.
Athens .....	100	57	5	3	.....	29	6
Belmont .....	143	73	30	5	1	26	8
Carroll .....	21	10	6	.....	.....	4	1
Columbiana .....	32	13	5	.....	.....	13	1
Coshocton .....	49	8	21	2	.....	17	1
Gallia .....	28	1	2	.....	.....	25	.....
Guernsey .....	48	26	6	1	.....	13	2
Harrison .....	43	8	2	2	.....	30	1
Hocking .....	77	31	4	5	.....	32	5
Holmes .....	20	.....	2	1	.....	16	1
Jackson .....	83	25	13	7	.....	32	1
Jefferson .....	70	37	12	3	.....	16	3
Lawrence .....	35	1	15	1	.....	17	1
Mahoning .....	20	5	1	.....	.....	12	2
Medina .....	2	.....	.....	.....	1	1	.....
Meigs .....	56	17	2	.....	.....	32	5
Monroe .....	1	.....	.....	1	.....	.....	.....
Morgan .....	4	2	.....	.....	.....	2	.....
Muskingum .....	54	15	13	4	.....	20	2
Noble .....	19	3	.....	.....	.....	16	.....
Perry .....	86	32	6	2	.....	41	5
Portage .....	3	3	.....	.....	.....	.....	.....
Scioto .....	4	.....	3	.....	.....	1	.....
Stark .....	66	12	15	1	2	32	4
Summit .....	4	.....	2	.....	.....	2	.....
Trumbull .....	2	.....	.....	.....	.....	2	.....
Tuscarawas .....	100	30	37	.....	6	21	6
Vinton .....	27	7	10	4	.....	6	.....
Washington .....	4	.....	.....	.....	.....	4	.....
Wayne .....	6	4	.....	.....	1	1	.....
State .....	1,207	420	217	42	11	462	55

TABLE 11. CLASSIFIED AVERAGE NUMBER OF EMPLOYES IN COAL MINES REPORTED IN OPERATION DURING YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

(Seventy-seven mines in which owners did their own work and twelve mines on which incomplete data were reported are not included in this table.)

County.	Total Number of Mines Reporting.	Number of Mines Reporting Average Number of Employees as—				
		Less than 10.	10 but under 50.	50 but under 100.	100 but under 200.	200 and over.
Athens .....	98.	36	26	6	15	15
Belmont .....	129	43	27	14	23	22
Carroll .....	23	9	11	1	1	1
Columbiana .....	32	16	10	4	2	.....
Coshocton .....	49	32	15	1	1	.....
Gallia .....	20	19	1	.....	.....	.....
Guernsey .....	47	18	7	3	8	11
Harrison .....	47	30	6	5	3	3
Hocking .....	76	28	35	6	5	2
Holmes .....	20	20	.....	.....	.....	.....
Jackson .....	86	43	29	13	1	.....
Jefferson .....	81	21	25	13	9	13
Lawrence .....	36	22	13	.....	1	.....
Mahoning .....	19	12	7	.....	.....	.....
Medina .....	3	2	1	.....	.....	.....
Meigs .....	58	32	13	7	4	2
Monroe .....	1	1	.....	.....	.....	.....
Morgan .....	4	2	.....	1	.....	1
Muskingum .....	54	33	16	2	3	.....
Noble .....	14	11	.....	.....	.....	3
Perry .....	90	36	31	13	7	3
Portage .....	3	2	.....	1	.....	.....
Scioto .....	4	3	1	.....	.....	.....
Stark .....	67	48	15	4	.....	.....
Summit .....	3	2	1	.....	.....	.....
Trumbull .....	2	2	.....	.....	.....	.....
Tuscarawas .....	105	50	40	7	8	.....
Vinton .....	26	12	13	.....	1	.....
Washington .....	4	4	.....	.....	.....	.....
Wayne .....	6	3	2	1	.....	.....
State .....	1,207	592	345	102	92	76

TABLE 12. AVERAGE NUMBER OF EMPLOYEES IN PICK AND MACHINE MINES. 1917 COMPARED WITH 1916. BY COUNTIES.

County.	In Pick Mines.		In Machine Mines.		Total.		Gain in Total Employees.		Loss in Total Employees.	
	1916.	1917.	1916.	1917.	1916.	1917.	Num-ber.	Per Cent.	Num-ber.	Per Cent.
Athens .....	129	219	5,945	7,176	6,074	7,396	1,321	21.7	.....	.....
Belmont .....	90	318	11,200	11,761	11,290	12,079	789	7.0	.....	.....
Carroll .....	72	247	841	458	413	705	292	70.7	.....	.....
Columbiana .....	157	202	498	847	655	849	194	29.6	.....	.....
Coshocton .....	243	321	303	395	546	716	170	31.1	.....	.....
Gallia .....	18	68	9	9	27	77	50	185.2	.....	.....
Guernsey .....	52	138	4,160	4,331	4,212	4,469	257	6.1	.....	.....
Harrison .....	58	226	847	1,163	900	1,389	489	54.3	.....	.....
Hocking .....	101	225	1,626	2,398	1,727	2,623	896	51.9	.....	.....
Holmes .....	45	64	.....	.....	45	64	19	42.2	.....	.....
Jackson .....	716	1,000	831	857	1,547	1,857	310	20.0	.....	.....
Jefferson .....	170	294	5,096	5,089	5,266	5,383	117	2.2	.....	.....
Lawrence .....	323	508	.....	.....	323	508	185	57.6	.....	.....
Mahoning .....	47	99	13	31	60	130	70	116.7	.....	.....
Medina .....	21	24	.....	.....	21	24	3	(a)	.....	.....
Meigs .....	54	271	1,621	1,640	1,675	1,911	236	14.1	.....	.....
Monroe .....	5	3	.....	.....	5	3	.....	.....	2	(a)
Morgan .....	2	4	277	356	279	360	81	29.0	.....	.....
Muskingum .....	191	412	409	534	600	946	346	57.7	.....	.....
Noble .....	18	28	812	845	830	873	43	5.2	.....	.....
Perry .....	112	463	2,086	2,918	2,148	3,381	1,233	57.4	.....	.....
Portage .....	7	8	117	122	124	130	6	(a)	.....	.....
Scioto .....	18	32	.....	.....	18	32	14	(a)	.....	.....
Stark .....	283	514	417	301	700	815	115	16.4	.....	.....
Summit .....	71	67	.....	.....	71	67	.....	.....	4	(a)
Trumbull .....	5	8	.....	.....	5	8	3	(a)	.....	.....
Tuscarawas .....	397	878	1,333	1,603	1,730	2,481	751	43.4	.....	.....
Vinton .....	20	183	170	272	190	455	265	139.5	.....	.....
Washington .....	1	12	.....	.....	1	12	11	(a)	.....	.....
Wayne .....	90	87	60	90	150	177	27	18.0	.....	.....
State .....	3,511	6,923	38,121	42,996	41,632	49,919	.....	.....	.....	.....
Net Gain—	.....	.....	.....	.....	.....	.....	8,287	.....	.....	.....
Number	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Per Cent.	.....	.....	.....	.....	.....	.....	.....	19.9	.....	.....

(a) Not computed owing to small number of employees.

TABLE 13. AVERAGE NUMBER AND PER CENT OF EMPLOYES REPORTED ANNUALLY IN PICK AND MACHINE MINES. 1904 TO 1917 INCLUSIVE.

Year.	Average Number of Employees			Per Cent. of Total Employees.	
	In Pick Mines.	In Machine Mines.	Total.	In Pick Mines.	In Machine Mines.
1904 .....	17,723	28,111	45,834	38.7	61.3
1905 .....	14,138	30,055	44,193	32.0	68.0
1906 .....	13,128	33,373	46,501	28.2	71.8
1907 .....	12,927	34,949	47,876	27.0	73.0
1908 .....	11,938	38,330	50,267	23.7	76.3
1909 .....	10,334	36,685	47,019	22.0	78.0
1910 .....	9,607	39,223	48,830	19.7	80.3
1911 .....	7,744	40,633	48,407	16.0	84.0
1912 .....	7,841	39,393	47,234	16.6	83.4
1913 .....	7,303	41,117	48,420	15.1	84.9
1914 .....	5,143	41,822	46,965	11.0	89.0
1915 .....	3,882	37,548	41,430	9.4	90.6
1916 .....	3,511	38,121	41,632	8.4	91.6
1917 .....	6,923	42,996	49,919	13.9	86.1

TABLE 14. AVERAGE NUMBER OF EMPLOYEES IN PICK MINES, BY OCCUPATIONS. 1917 COMPARED WITH 1916. BY COUNTIES.

County.	Pick Miners.		Inside Day Hands.		Outside Day Hands.		Total.	
	1916	1917	1916	1917	1916	1917	1916	1917
Athens .....	112	148	13	27	4	44	129	219
Belmont .....	76	237	10	39	4	42	90	318
Carroll .....	40	170	24	42	8	35	72	247
Columbiana .....	125	141	20	34	12	27	157	202
Coshocton .....	197	228	34	55	12	38	243	321
Gallia .....	18	55	.....	8	.....	5	18	68
Guernsey .....	46	95	5	23	1	20	52	138
Harrison .....	53	146	.....	27	.....	53	53	226
Hocking .....	85	164	11	23	5	38	101	225
Holmes .....	44	60	1	.....	.....	4	45	64
Jackson .....	509	664	140	212	67	124	716	1,000
Jefferson .....	142	203	20	42	8	49	170	294
Lawrence .....	239	372	57	75	27	61	323	508
Mahoning .....	45	82	2	8	.....	9	47	99
Medina .....	17	16	2	4	2	4	21	24
Meigs .....	45	178	6	43	3	50	54	271
Monroe .....	5	3	.....	.....	.....	.....	5	3
Morgan .....	2	4	.....	.....	.....	.....	2	4
Muskingum .....	169	297	14	47	8	68	191	412
Noble .....	18	25	.....	1	.....	2	18	28
Perry .....	95	341	12	45	5	77	112	463
Portage .....	3	3	2	1	2	4	7	8
Scioto .....	11	20	3	6	4	6	18	32
Stark .....	203	360	47	83	33	71	283	514
Summit .....	47	39	12	13	12	15	71	67
Trumbull .....	4	5	.....	1	1	2	5	8
Tuscarawas .....	325	616	51	158	21	104	397	878
Vinton .....	19	126	1	30	.....	27	20	183
Washington .....	1	9	.....	1	.....	2	1	12
Wayne .....	51	53	21	17	18	17	90	87
State .....	2,746	4,860	508	1,065	257	998	3,511	6,923

TABLE 15. AVERAGE NUMBER OF EMPLOYEES IN MACHINE MINES.  
BY OCCUPATION. 1917 COMPARED WITH 1916. BY COUNTIES.

County.	Machine Runners and Helpers.		Loaders (Including Drillers and Shooters).		Pick Miners in Machine Mines.		Inside Day Hands.		Outside Day Hands.		Total.	
	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.	1916.	1917.
Athens .....	375	531	3,836	4,234	78	190	1,083	1,371	573	850	5,945	7,176
Belmont .....	968	1,139	7,218	6,722	69	142	1,967	2,339	980	1,419	11,200	11,761
Carroll .....	35	47	219	255	.....	28	60	91	27	37	341	458
Columbiana .....	49	63	297	353	1	2	109	148	42	81	496	647
Coshocton .....	32	22	129	127	41	79	66	101	36	66	308	396
Gallia .....	2	2	3	3	.....	.....	1	2	3	2	9	9
Guernsey .....	321	353	2,461	2,336	10	23	1,028	1,253	340	366	4,160	4,381
Harrison .....	84	91	499	628	2	2	175	247	37	196	847	1,163
Hocking .....	111	185	1,016	1,433	45	66	270	377	185	387	1,626	2,398
Jackson .....	72	70	416	384	52	63	193	214	98	129	881	867
Jefferson .....	439	494	3,063	2,791	88	76	1,007	1,032	509	696	5,096	5,089
Mahoning .....	2	6	5	12	.....	2	3	6	3	5	13	31
Meigs .....	150	116	933	875	.....	16	373	371	165	262	1,621	1,640
Morgan .....	32	39	164	208	.....	.....	60	71	21	38	277	356
Muskingum .....	49	60	255	304	.....	3	66	112	39	55	409	534
Noble .....	62	64	500	496	.....	.....	196	234	54	61	812	845
Perry .....	161	258	1,201	1,664	38	84	394	542	242	370	2,036	2,918
Portage .....	4	6	40	32	30	32	26	30	17	22	117	122
Stark .....	33	37	196	109	58	34	71	83	59	38	417	801
Tuscarawas .....	158	189	714	749	40	41	241	409	180	215	1,333	1,603
Vinton .....	16	18	101	158	.....	10	37	55	16	31	170	272
Wayne .....	6	9	13	37	18	10	13	22	10	12	60	90
State .....	3,161	3,799	23,266	23,900	570	903	7,438	9,110	3,686	5,284	38,121	42,996



TABLE 16. AVERAGE NUMBER OF DAYS WORKED PER YEAR BY PICK MINERS IN PICK MINES, AND BY LOADERS (INCLUDING DRILLERS AND SHOOTERS) IN MACHINE MINES. 1917 COMPARED WITH 1916. BY COUNTIES.

(Pick miners employed in machine mines are not included in this table.)

County.	Average Number of Days Worked by			
	Pick Miners in Pick Mines.		Loaders (including Drillers and Shooters) in Machine Mines.	
	1916	1917	1916	1917
Athens .....	198	145	152	213
Belmont .....	169	161	204	203
Carroll .....	231	173	235	225
Columbiana .....	195	217	262	254
Coshocton .....	179	220	175	172
Gallia .....	105	142	.....	132
Guernsey .....	184	163	213	182
Harrison .....	179	141	189	147
Hocking .....	203	169	203	212
Holmes .....	155	193	.....	.....
Jackson .....	149	210	205	212
Jefferson .....	237	168	214	209
Lawrence .....	219	213	73	.....
Mahoning .....	178	212	240	252
Medina .....	281	295	.....	.....
Meigs .....	115	166	215	215
Monroe .....	140	162	.....	.....
Morgan .....	300	200	236	219
Muskingum .....	169	175	208	204
Noble .....	178	187	217	205
Perry .....	223	171	153	200
Portage .....	.....	312	204	273
Scioto .....	49	98	.....	.....
Stark .....	167	200	149	225
Summit .....	126	149	.....	.....
Trumbull .....	195	209	.....	.....
Tuscarawas .....	202	217	219	200
Vinton .....	255	169	153	229
Washington .....	90	110	.....	.....
Wayne .....	70	93	.....	205
State .....	182	188	197	204

TABLE 17. AVERAGE NUMBER OF DAYS WORKED PER YEAR BY PICK MINERS IN PICK MINES AND BY LOADERS (INCLUDING DRILLERS AND SHOOTERS) IN MACHINE MINES, 1904 TO 1917 INCLUSIVE.

(Pick miners employed in machine mines are not included in this table.)

Year.	Average Number of Days Worked by	
	Pick Miners in Pick Mines.	Loaders (Including Drillers and Shooters) in Machine Mines.
1904 .....	159	169
1905 .....	169	169
1906 .....	176	173
1907 .....	191	201
1908 .....	160	157
1909 .....	182	172
1910 .....	168	209
1911 .....	168	175
1912 .....	173	199
1913 .....	189	206
1914 .....	150	101
1915 .....	168	137
1916 .....	182	197
1917 .....	188	204

County.	Pick Miners in Pick Mines.					Loaders (Including Drillers and Shooters) in Machine Mines.												
	Number reported.	Average number of days worked.	Number working each classified number of days.					Number reported.	Number working each classified number of days.									
			Less than 50.	50 but under 100.	100 but under 150.	150 but under 200.	200 but under 250.		250 but under 300.	300 or more.	Average number of days worked.	Less than 50.	50 but under 100.	100 but under 150.	150 but under 200.	200 but under 250.	250 but under 300.	300 or more.
Athens .....	148	145	21	24	40	19	15	19	10	4,234	213	18	121	300	594	2,906	395	114
Belmont .....	287	181	24	43	37	39	37	31	36	6,732	293	343	66	182	1,963	3,901	883	
Carroll .....	170	173	22	9	19	45	22	31	9	265	226					246		
Columbia .....	141	217	22	12	30	24	19	63	22	353	254					11	279	
Coshocton .....	223	220	4	9	13	40	50	101	11	127	172				86	22		
Gallia .....	35	142	16	14	28	4				3	132							
Guernsey .....	95	163	16	16	8	11	17	20	7	2,386	182				1,774	530		
Harrison .....	146	141	13	38	25	12	23	21	3	623	147	32			21	291	83	
Hocking .....	164	169	3	8	41	43	99			1,433	212	133	54	54	214	733	362	
Holmes .....	60	138	5	4	7	14	15		4									
Jackson .....	664	210	13	30	57	112	273	11		384	212	26	44		36	117	171	
Jefferson .....	203	168	25	41	14	34	37	13	39	2,791	209	166	51	5	725	1,223	623	93
Lawrence .....	372	213	37	6	49	5	65	160	50									
Mahoning .....	82	212	8	8	6	3	13	19	20	12	252					4	4	
Madina .....	16	235						8	8									
Meigs .....	178	166	9	27	35	50	34	17	6	875	215	20	3	15	310	148	379	
Monroe .....	3	162																
Morgan .....	4	200				2		2		203	219		26		182			
Muskingum .....	297	175	43	19	41	65	42	63	19	304	204		54	104	60	86		
Noble .....	25	187	12				12	1	3	486	205			188	298			
Perry .....	341	171	30	54	49	63	69	71	5	1,664	200	43	34	251	141	1,132	33	
Portage .....	3	312							3	32	273				2	30		
Scioto .....	20	98	8	5			7											
Stark .....	300	200	12	50	29	46	103	91	24	109	225		42	12	4	4	47	
Summit .....	39	149		24			15											
Trumbull .....	5	209				2	3											
Tuscarawas .....	616	217	13	30	75	61	211	137	89	749	200		26	25	246	395	43	9
Vinton .....	126	169	5	26	25	24	17		29	153	229		21		52	85		
Washington .....	9	110				1		9	1									
Wayne .....	53	96		40	4	2			7	37	205					37		
State .....	4,360	188	316	535	647	724	1,171	1,089	423	23,900	204	302	445	1,009	6,733	11,344	3,296	267

TABLE 19. FLUCTUATION IN NUMBER OF EMPLOYEES IN COAL MINES REPORTED IN OPERATION DURING THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

(Seventy-seven mines in which owners did their own work and thirteen for which incomplete data were furnished, are not included in this table.)

County.	Number of mines report- ing.	Number of Employees on the Payroll Nearest the 15th of												Variation from Maximum.	
		Jan.	Feb.	Mch.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Number.	Per Cent.
Athens	98	6,062	6,165	6,261	6,249	6,994	6,891	7,176	7,288	7,195	7,291	7,397	7,235	1,335	18.0
Bellmont	129	10,959	10,905	10,842	10,742	10,944	11,295	11,349	11,438	11,387	11,457	11,547	11,970	1,228	10.3
Carroll	23	599	582	672	659	671	676	666	669	665	708	751	759	1,177	20.8
Columbiana	32	754	762	766	761	787	777	798	801	835	846	865	890	186	15.3
Coshocton	49	571	569	572	553	554	566	583	581	573	596	637	649	118	18.2
Gallia	20	36	49	49	46	41	54	65	71	51	76	84	77	48	57.1
Guernsey	47	4,199	4,186	4,169	4,040	4,087	4,184	4,213	4,192	4,187	4,294	4,313	4,280	273	6.3
Harrison	48	1,002	1,024	517	632	992	1,233	1,861	1,444	1,444	1,467	1,467	1,576	1,059	67.2
Hocking	76	2,291	2,293	2,316	2,343	2,459	2,506	2,501	2,573	2,543	2,538	2,562	2,592	901	11.6
Holmes	20	52	58	43	32	30	35	35	30	47	57	68	66	36	64.5
Jackson	86	1,557	1,571	1,513	1,466	1,494	1,506	1,547	1,679	1,699	1,743	1,781	2,890	1,424	49.3
Jefferson	81	4,961	4,870	4,660	4,508	4,673	5,337	5,343	5,470	5,560	5,665	5,701	5,862	1,354	23.1
Lawrence	36	460	438	432	380	405	422	419	450	468	487	516	508	136	28.4
Mahoning	19	109	102	89	63	64	68	70	80	90	103	130	150	87	57
Medina	2	31	33	29	23	23	22	25	24	30	18	17	19	16	48.5
Meigs	57	1,540	1,517	1,543	1,542	1,523	1,594	1,809	1,844	1,881	1,903	1,891	1,942	425	21.9
Monroe	1	5	4	2	2	5	5	3	3	3	3	3	3	3	60.0
Morgan	4	297	302	296	302	308	314	335	345	340	376	384	400	114	23.5
Muskingum	54	681	663	671	632	712	743	785	835	863	861	881	923	301	32.6
Noble	14	801	824	848	839	840	842	888	860	867	868	869	871	70	8.0
Perry	90	2,660	2,738	2,721	2,665	2,667	2,825	2,797	3,045	3,379	3,470	3,592	3,665	960	26.4
Portage	8	145	147	144	130	116	133	112	114	127	130	132	137	35	23.8
Scioto	2	2	2	5	5	5	4	4	1	12	12	12	21	20	96.2
Stark	67	613	635	660	585	584	599	604	660	701	759	894	865	281	32.5
Summit	3	62	62	60	12	14	15	16	21	22	27	30	32	50	80.6
Tuscarawas	2	6	8	7	7	5	2	2	2,200	2,266	2,307	2,415	2,465	6	75.0
Trumbull	106	1,848	1,909	1,891	1,943	2,004	2,164	2,154	2,200	2,266	2,307	2,415	2,465	617	25.0
Vinton	26	285	333	349	347	371	387	389	387	403	408	435	437	152	24.8
Washington	4	4	4	4	4	11	11	10	13	15	13	12	12	11	73.3
Wayne	6	153	142	116	92	87	86	81	83	98	100	163	159	78	49.1
State	1,206	42,715	42,787	42,332	41,584	43,164	45,216	46,063	47,176	47,711	48,405	49,461	51,412	9,828	19.1

TABLE 20. AVERAGE NUMBER OF TONS OF COAL PRODUCED PER YEAR AND PER DAY PER EMPLOYEE IN CERTAIN SPECIFIED OCCUPATIONS, 1917 COMPARED WITH 1916, BY COUNTIES.  
(Pick miners employed in machine mines are not included in this table.)

County.	PICK MINES.						MACHINE MINES.					
	Pick Miners.			Runners and Helpers.			Loaders (Including Drillers and Shooters).					
	Average Number of Tons Mined Per Year.		Average Number of Tons Mined Per Day.	Average Number of Tons Mined Per Year.		Average Number of Tons Mined Per Day. (a)	Average Number of Tons Mined Per Year.		Average Number of Tons Mined Per Day.			
	1916.	1917.		1916.	1917.		1916.	1917.		1916.	1917.	
Athens	980	777	1.9	9,190	11,217	60.4	930	1,407	6.1	930	1,407	6.6
Belmont	467	692	2.3	10,800	9,341	52.9	1,452	1,583	7.1	1,452	1,583	7.8
Carril	1,066	832	1.8	7,578	6,819	32.2	1,922	1,287	5.2	1,922	1,287	5.6
Columbiana	342	721	2.4	9,415	8,037	36.0	1,526	1,439	5.8	1,526	1,439	5.7
Coshocton	617	744	2.4	4,645	7,155	28.5	1,162	1,389	6.6	1,162	1,389	7.2
Gallia	190	371	1.8	13,479	11,653	63.6	1,758	1,694	8.3	1,758	1,694	8.3
Guernsey	322	609	2.9	10,469	9,640	56.4	1,706	1,397	9.5	1,706	1,397	9.5
Harrison	390	373	2.6	11,399	10,666	56.2	1,399	1,377	6.3	1,399	1,377	6.5
Hocking	838	1,073	2.3	5,663	5,126	27.6	931	934	4.5	931	934	4.4
Holmes	353	386	2.3	11,084	9,382	51.6	1,558	1,606	7.3	1,558	1,606	8.1
Jackson	588	929	3.3	3,664	2,774	15.3	1,463	1,387	6.1	1,463	1,387	5.5
Jefferson	791	683	3.0	6,571	9,543	30.6	1,071	1,265	5.0	1,071	1,265	5.9
Lawrence	655	648	2.9	10,887	8,329	46.1	1,597	1,562	6.6	1,597	1,562	7.1
Madison	414	367	2.3	16,264	5,753	55.0	1,776	1,135	5.7	1,776	1,135	5.6
Medina	524	311	1.9	13,798	14,214	69.3	1,709	1,872	7.9	1,709	1,872	9.1
Meigs	467	513	1.2	6,513	7,704	42.6	981	1,104	5.8	981	1,104	6.0
Monroe	182	227	1.3	9,666	7,863	47.1	961	1,480	4.7	961	1,480	5.4
Morgan	345	290	3.3	4,863	4,108	32.8	560	1,365	5.7	560	1,365	6.2
Muskingum	556	632	3.3	7,061	6,124	32.2	1,592	1,545	7.1	1,592	1,545	7.7
Noble	374	320	2.1	6,410	8,337	36.4	867	960	5.6	867	960	4.1
Perry	931	831	4.3	3,540	5,854	28.1	1,424	1,494	6.9	1,424	1,494	6.9
Portage	1,100	1,100	3.5	9,996	9,402	50.6	1,859	1,494	6.9	1,859	1,494	7.3
Scioto	56	130	1.1									
Stark	356	721	3.3									
Summit	814	743	6.3									
Trumbull	279	253	1.4									
Tuscarawas	920	868	4.6									
Vinton	919	437	3.6									
Washington	170	136	1.8									
Wayne	336	169	5.1									
State	669	736	3.6	9,996	9,402	50.6	1,859	1,494	6.9	1,859	1,494	7.3

(a) The tonnage per day is computed for machine runners and helpers on the assumption that they worked the same number of days as did the

TABLE 21. AVERAGE NUMBER OF TONS OF COAL PRODUCED PER YEAR AND PER DAY, PER EMPLOYEE IN CERTAIN SPECIFIED OCCUPATIONS. 1895 TO 1917, INCLUSIVE.

Year.	Pick Mines.		Machine Mines.			
	Pick Miners.		Runners and Helpers.		Loaders (Including Drillers and Shooters).	
	Average Number of Tons Mined Per Year.	Average Number of Tons Mined Per Day.	Average Number of Tons Cut per Year.	Average Number of Tons Cut per (a) Day.	Average Number of Tons Loaded Per Year.	Average Number of Tons Loaded Per Day.
1895 .....	568	3.4	6,981	44.7	925	5.9
1896 .....	431	2.9	5,817	40.4	775	5.4
1897 .....	509	3.4	5,610	41.6	821	6.1
1898 .....	546	3.6	6,524	38.2	892	5.2
1899 .....	443	2.9	8,016	43.6	1,070	6.3
1900 .....	411	2.4	8,467	47.4	1,128	6.3
1901 .....	395	2.2	6,247	34.3	1,155	6.4
1902 .....	380	2.2	9,478	49.9	1,212	6.4
1903 .....	640	3.6	7,471	39.3	1,027	5.4
1904 .....	602	3.8	7,204	42.0	684	4.0
1905 .....	653	3.9	7,255	41.8	686	4.0
1906 .....	661	3.8	7,155	41.4	991	5.7
1907 .....	676	3.5	8,725	42.4	1,187	5.8
1908 .....	518	3.2	6,823	43.5	869	5.5
1909 .....	595	3.3	7,327	42.8	972	5.7
1910 .....	602	3.6	9,136	45.5	1,195	5.7
1911 .....	597	3.6	7,904	45.4	1,015	5.8
1912 .....	641	3.7	8,840	44.6	1,218	6.1
1913 .....	681	3.6	8,690	42.6	1,260	6.1
1914 .....	508	3.3	(a) 4,564	(a) 45.2	622	6.1
1915 .....	591	3.5	(a) 6,395	(a) 46.7	841	6.1
1916 .....	659	3.6	(a) 9,966	(a) 50.6	1,359	6.9
1917 .....	733	3.9	(a) 9,402	(a) 46.1	1,494	7.3

(a) The tonnage per day, 1914 to 1917 inclusive, for machine runners and helpers is computed on the assumption that they worked the same number of days as did the loaders in their respective mines.

TABLE 22 — TOTAL WAGE AND SALARY PAYMENTS OF COAL MINES  
REPORTING FOR THE YEAR ENDING DECEMBER 31, 1917. BY  
COUNTIES.

(Seventy-seven mines in which the owners did their own work and ten mines for which incomplete data were reported, are not included in this table.)

County.	Total Number of Mines Report- ing.	Aggregate Wage and Salary Payments.		
		To Wage Earners.	To Office Help.	Total.
Athens .....	98	\$6,441,045	\$54,641	\$6,495,686
Belmont .....	129	10,855,826	142,817	10,998,643
Carroll .....	23	611,345	17,441	628,786
Columbiana .....	32	826,572	13,455	840,027
Coshocton .....	49	517,271	13,343	530,614
Gallia .....	20	35,894	2,400	38,294
Guernsey .....	47	4,126,468	54,368	4,180,836
Harrison .....	47	1,204,360	18,888	1,223,248
Hocking .....	77	2,235,072	37,458	2,272,530
Holmes .....	20	37,818	.....	37,818
Jackson .....	88	1,418,680	29,532	1,448,212
Jefferson .....	81	5,772,845	148,589	5,921,434
Lawrence .....	36	307,231	9,121	316,352
Mahoning .....	19	81,654	500	82,154
Medina .....	3	22,171	3,600	25,771
Meigs .....	57	1,615,989	24,027	1,640,016
Monroe .....	1	850	.....	850
Morgan .....	4	343,600	4,143	347,743
Muskingum .....	54	634,373	12,731	647,104
Noble .....	14	920,742	8,089	928,831
Perry .....	90	2,766,934	23,321	2,790,255
Portage .....	3	155,317	4,876	160,193
Scioto .....	4	7,293	200	7,493
Stark .....	67	680,050	15,432	695,482
Summit .....	3	33,553	.....	33,553
Trumbull .....	2	3,352	320	3,672
Tuscarawas .....	105	2,181,651	53,860	2,235,511
Vinton .....	26	288,288	4,339	292,627
Washington .....	4	4,877	.....	4,877
Wayne .....	6	114,054	.....	114,054
State .....	1,209	\$44,245,175	\$697,491	\$44,942,666

TABLE 23. CLASSIFIED WEEKLY WAGES OF EMPLOYEES IN AND AROUND COAL MINES FOR THE WEEK OF  
GREATEST EMPLOYMENT DURING THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.  
(The employees of twenty-four stripping mines and nine mines for which incomplete data were reported, are not included in this table.)

County.	Number receiving each classified weekly wage.														Total.
	Under \$4.	\$4 but under \$5.	\$5 but under \$6.	\$6 but under \$7.	\$7 but under \$8.	\$8 but under \$9.	\$9 but under \$10.	\$10 but under \$12.	\$12 but under \$15.	\$15 but under \$18.	\$18 but under \$25.	\$25 but under \$35.	\$35 and over.		
Athens .....	1	2	1	12	7	5	7	81	105	921	2,980	1,904	619	7,673	
Belmont .....					42	79	104	194	319	971	4,411	5,032	1,094	12,733	
Carroll .....			3		9	4	10	10	60	76	247	247	30	777	
Columbiana .....			1	1		2	3	9	41	79	385	253	141	590	
Coshocton .....							1	2	33	142	251	243	39	713	
Gallia .....				2	2		6	4	10	14	21	13	2	72	
Guernsey .....					4	13	17	63	75	315	2,247	1,832	384	4,458	
Harrison .....					2	6	4	14	83	298	542	471	95	1,471	
Hocking .....	1	1	1	17	7	25	29	74	861	519	2,991	683	280	2,791	
Holmes .....						1	1	11	11	29	16	8	5	70	
Jackson .....			1	2		9	10	19	104	364	797	524	105	1,948	
Jefferson .....	2	1	1	4	16	5	8	57	195	384	1,931	2,499	644	5,637	
Lawrence .....		1			2		1	4	106	165	1,143	39	10	163	
Mahoning .....	1								11	27	42	62	2	133	
Medina .....									12	2	11	5	2	32	
Meigs .....			4	4	5	1	6	30	94	363	473	337	171	2,013	
Monroe .....														3	
Morgan .....								2	29	32	161	179	27	420	
Muskingum .....				2	3	3	6	16	67	208	296	319	54	999	
Noble .....								26	6	15	598	233	14	941	
Perry .....				1	1	3	13	38	186	722	1,213	959	459	3,497	
Portage .....	4	1	2	5	1	1	1	2	25	7	25	68	33	133	
Scioto .....			1	1		4	5	6	25	1	6	1		33	
Stark .....				1	3	4	6		72	187	280	193	116	897	
Summit .....									6	10	8	17	25	67	
Trumbull .....									1	6	8	10		9	
Tuscarawas .....				1	3	8	5	33	110	378	785	895	458	2,671	
Vinton .....								13	10	40	124	244	30	461	
Washington .....				1				1	2	11	11	2		15	
Wayne .....							1			44	23	79	41	138	
State .....	7	6	16	56	108	170	242	710	2,154	6,344	19,904	17,268	5,313	52,303	



TABLE 24—CLASSIFIED WEEKLY WAGES OF EMPLOYEES IN AND AROUND COAL MINES FOR THE WEEK OF GREATEST EMPLOYMENT DURING THE YEAR ENDING DECEMBER 31, 1917. BY OCCUPATIONS.

(The employees of twenty-four stripping mines and nine mines for which incomplete data are reported, are not included in this table.)

Occupation Group.	Number receiving each classified weekly wage.												
	Under \$4.	\$4 but under \$5.	\$5 but under \$6.	\$6 but under \$7.	\$7 but under \$8.	\$8 but under \$9.	\$9 but under \$10.	\$10 but under \$12.	\$12 but under \$15.	\$15 but under \$18.	\$18 but under \$25.	\$25 but under \$35.	\$35 and over.
<b>Wage earners—</b>													
Pick Miners (a).....	1	3	17	9	13	36	120	557	1,173	1,802	1,775	761	6,827
Machine Runners and Helpers.....	.....	.....	.....	.....	.....	6	14	20	87	678	1,405	1,368	3,578
Loaders, including Drillers and Shooters.....	1	1	12	56	120	121	226	800	2,856	11,111	7,292	2,007	24,608
Other Inside Employees.....	1	2	5	30	28	80	255	335	1,122	3,771	4,258	611	10,448
Outside Employees.....	4	6	9	6	4	40	79	391	1,086	2,388	2,410	479	6,803
<b>Total</b> .....	4	12	48	101	165	233	694	2,103	6,274	19,700	17,140	5,226	51,759
<b>Office Help—</b>													
Males.....	2	4	6	2	1	3	4	26	33	115	113	86	397
Females.....	1	.....	7	5	4	6	12	25	37	29	15	6	147
<b>Total</b> .....	3	4	13	7	5	9	16	51	70	144	128	92	544
<b>Grand Total</b> .....	7	16	56	108	170	242	710	2,154	6,344	19,804	17,268	5,318	52,303

(a) This table includes pick miners in both pick and machine mines.

TABLE 25—FATAL ACCIDENT CLAIMS BEFORE THE INDUSTRIAL COMMISSION OF OHIO DURING THE YEAR ENDING DECEMBER 31, 1917.

County.	Number of Deaths.	Total Awards (Includes Death Benefits, Medical, Hospital, and Funeral Expenses.)
Closed Cases —		
Athens .....	13	\$38,581 43
Belmont .....	18	51,288 76
Columbiana .....	1	3,637 16
Coshocton .....	1	4,666 40
Guernsey .....	13	39,147 39
Jackson .....	4	15,274 68
Jefferson .....	11	38,323 95
Meigs .....	4	11,636 16
Morgan .....	1	3,878 16
Perry .....	3	8,274 09
Summit .....	1	3,968 50
Tuscarawas .....	7	21,755 00
Vinton .....	2	5,641 21
Partially Closed Cases —		
Harrison .....	1	150 00
Stark .....	1	150 00
Pending Cases —		
Athens .....	1	.....
Belmont .....	9	.....
Guernsey .....	1	.....
Jefferson .....	5	.....
Tuscarawas .....	2	.....
Total Cases .....	99	.....
Total Awards .....		\$246,372 86

TABLE 26—NUMBER OF MEN EMPLOYED AND TONS OF COAL MINED PER FATAL ACCIDENT DURING THE YEAR ENDING DECEMBER 31, 1917. BY COUNTIES.

County.	Total number of men employed.	Total number of tons mined.	Fatal Accidents.		
			Number.	Number of men employed per life lost.	Tons of coal mined per life lost.
Athens .....	7,673	6,313,619	12	639	526,135
Belmont .....	12,738	11,156,626	32	398	348,645
Carroll .....	777	487,092	2	389	243,546
Columbiana .....	896	616,925	1	896	616,925
Coshocton .....	713	371,785			
Gallia .....	72	28,270			
Guernsey .....	4,531	4,024,265	15	302	268,284
Harrison .....	1,798	1,222,561	2	899	611,281
Hocking .....	2,791	2,211,858	3	930	737,286
Holmes .....	70	20,144			
Jackson .....	1,958	1,016,249	2	979	508,125
Jefferson .....	6,409	5,742,240	18	356	319,013
Lawrence .....	558	241,333			
Mahoning .....	153	50,537			
Medina .....	32	10,088			
Meigs .....	2,018	1,267,144	5	404	253,429
Monroe .....	3	682			
Morgan .....	420	326,008	1	420	326,008
Muskingum .....	999	541,261			
Noble .....	941	918,519	4	235	229,630
Perry .....	3,652	2,445,114	6	609	407,519
Portage .....	133	92,439			
Scioto .....	33	2,608			
Stark .....	871	471,034	1	871	471,034
Summit .....	67	29,680			
Trumbull .....	9	1,266			
Tuscarawas .....	2,691	1,788,800	8	336	223,600
Vinton .....	461	212,940	1	461	212,940
Washington .....	15	1,137			
Wayne .....	188	65,762			
State .....	53,670	41,677,986	113	475	368,832

TABLE 27. CAUSES OF FATAL ACCIDENTS OCCURRING IN OHIO COAL MINES DURING THE YEAR ENDING  
DECEMBER 31, 1917. BY COUNTIES.

Counties.	Falls of Stone, Slate or Coal.	Mine Cars.	Elec- tricity.	Motor.	Mining Ma- chines.	Blown Out Shot.	Rail- road Cars.	Powder Explo- sion.	Gas Explo- sion.	Miscel- laneous.	Total.
Athens .....	6	3	.....	.....	.....	.....	.....	1	.....	2	12
Belmont .....	19	9	.....	1	.....	.....	1	.....	.....	2	82
Carroll .....	.....	.....	.....	.....	.....	.....	.....	1	.....	1	2
Columbiana .....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Guernsey .....	10	3	1	.....	1	.....	.....	.....	.....	.....	15
Harrison .....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Hocking .....	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
Jackson .....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
Jefferson .....	10	2	2	1	.....	1	.....	.....	1	1	18
Meigs .....	3	.....	1	.....	.....	.....	.....	.....	.....	1	5
Morgan .....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
Noble .....	2	2	.....	.....	.....	.....	.....	.....	.....	.....	4
Perry .....	2	1	.....	1	.....	.....	.....	.....	.....	.....	6
Stark .....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1
Tuscarawas .....	6	1	.....	.....	.....	.....	.....	1	.....	.....	8
Vinton .....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
State .....	67	21	4	3	1	1	1	4	1	10	113

## FIRE CLAY MINES.

### PRODUCTION.

Fire clay production in Ohio in 1917 totalled 2,413,380 tons. Since 1884, the annual output has exceeded this amount in only one year, 1913, when 2,442,121 tons were mined. Compared with the preceding year, the production shows an increase of 2.5 per cent.

Seventeen counties mined fire clay. Their tonnage, together with per cent gain or loss as compared with 1916, is shown in the following table:

County.	Tons Produced.		Gain.		Loss.	
	1916.	1917.	Tons.	Per Cent.	Tons.	Per Cent.
Athens .....	98,734	103,099	4,365	4.4	.....	.....
Belmont .....	15,500	14,000	.....	.....	1,500	9.7
Carroll .....	251,834	208,788	.....	.....	43,046	17.1
Columbiana .....	272,232	299,928	27,696	10.2	.....	.....
Guernsey .....	16,052	17,865	1,813	11.3	.....	.....
Hocking .....	122,696	128,661	5,965	4.9	.....	.....
Jackson .....	22,601	29,162	6,561	29.0	.....	.....
Jefferson .....	410,460	333,269	.....	.....	77,191	18.8
Lawrence .....	54,813	56,648	1,835	3.3	.....	.....
Mahoning .....	43,426	41,387	.....	.....	2,039	4.7
Muskingum .....	18,732	6,206	.....	.....	12,526	66.9
Perry .....	88,955	99,976	11,021	12.4	.....	.....
Scioto .....	138,472	157,125	18,653	13.5	.....	.....
Stark .....	177,713	258,615	80,902	45.5	.....	.....
Summit .....	95,568	94,989	.....	.....	579	.6
Tuscarawas .....	501,044	538,716	37,672	7.5	.....	.....
Vinton .....	24,633	24,946	313	1.3	.....	.....
State .....	2,353,465	2,413,380	59,915	2.5	.....	.....

### CHARACTER OF OPENING.

One hundred and eight mines reported as to kind of opening as shown below:

<i>Kind of Opening.</i>	<i>Number of Mines.</i>
Drift .....	61
Slope .....	23
Shaft .....	12
Surface .....	6
Stripping .....	3
Drift and slope.....	1
Drift and shaft.....	1
Slope and shaft.....	1
Total number reporting.....	108

## VENTILATION.

The number of mines using each of the various modes of ventilation described on the fire clay schedule used by the Department of Investigation and Statistics is listed here:

<i>Mode of Ventilation.</i>	<i>Number of Mines.</i>
Fan .....	46
Natural .....	27
Furnace .....	21
Fan and natural .....	3
Exhaust steam and furnace .....	1
Total number reporting .....	98

## NUMBER OF EMPLOYEES.

Employment in fire clay mines varied 11.6 per cent from its maximum in March of 1,653 employees. The minimum was reached in December when only 1,461 workers were engaged. These figures are based upon returns from 112 mines which furnished the number of employees on their payrolls on the fifteenth of each month or on the nearest date thereto. These are shown below in comparison with similar returns for 1916:

Month.	Number of Employees on or near the 15th of the month.	
	1916 (103 mines)	1917 (112 mines)
January .....	1,099	1,571
February .....	1,129	1,618
March .....	1,192	1,653
April .....	1,248	1,646
May .....	1,254	1,650
June .....	1,152	1,630
July .....	1,287	1,615
August .....	1,294	1,632
September .....	1,273	1,591
October .....	1,328	1,577
November .....	1,328	1,578
December .....	1,357	1,461

## DAYS IN OPERATION.

The steadiness of operation of fire clay mines varied but little from 1916. For both years, it was approximately four-fifths of full-time work. All the data on this point is tabulated in the following statement:—

Number of Days in Operation.	1916 (98 mines)	1917 (107 mines)
Less than 100.....	3	5
100 but under 150.....	8	5
150 but under 200.....	8	11
200 but under 250.....	20	24
250 but under 300.....	40	44
300 but under 314.....	17	16
314 and over.....	2	2

## HOURS OF LABOR PER WEEK.

Normal hours of labor per week were 44 in two mines; 48 in seventy-one mines; between 48 and 54 in four mines; 54 in fifteen mines; 58 in one mine; between 58 and 60 in four mines; and 60 in thirteen mines.

## WAGES AND SALARY PAYMENTS.

Total wage and salary payments in 112 fire clay mines were \$1,350,295. Each of the following five counties reported payrolls of more than \$100,000:

<i>County.</i>	<i>Total Wage and Salary Payments.</i>
Stark .....	\$273,484
Tuscarawas .....	243,940
Carroll .....	157,629
Jefferson .....	149,310
Columbiana .....	138,625

Together these five counties furnished nearly three-fourths of the State's payroll in this industry. The total State figure exceeds by \$367,899 the amount reported paid in 1916.

## CLASSIFIED WEEKLY WAGE RATES.

Payrolls of 112 fire clay mines for the week of greatest employment in each show 1,876 employees of all classes. Their weekly wage rates, reported by occupation, follow:

CLASSIFIED WEEKLY WAGES OF EMPLOYEES IN FIRE CLAY MINES FOR THE WEEK OF GREATEST EMPLOYMENT DURING THE YEAR ENDING DECEMBER 31, 1917.

Occupation.	Number of Employees Receiving Each Classified Weekly Wage.											Total.
	Under \$6.	\$6 but under \$7.	\$7 but under \$8.	\$8 but under \$9.	\$9 but under \$10.	\$10 but under \$12.	\$12 but under \$15.	\$15 but under \$18.	\$18 but under \$25.	\$25 but under \$35.	\$35 or over.	
Wage earners—												
Inside employees .....	4	1	3	1	1	80	71	149	487	215	23	1,035
Outside employees .....			1		3	46	277	150	309	28	3	817
Office help—												
Males .....		1			2		1	5	3	4		16
Females .....				1	1		3	2	1			8
Total .....	4	2	4	2	7	126	352	306	800	247	26	1,876



## GYPSUM MINES.

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Three gypsum mines in Erie County and one in Ottawa County filed returns with the Industrial Commission on business transacted during 1917.

Their aggregate production was 270,552 tons, a decrease of 3.2 per cent from the tonnage of 1916, but an increase over each other year since 1911.

These mines paid out \$202,977 in wages during the year to 294 adult male wage earners. Of these—

2	earned	\$12	but	under	\$15	per	week.
20	earned	\$15	but	under	\$18	per	week.
243	earned	\$18	but	under	\$25	per	week.
29	earned	\$25	but	under	\$35	per	week.

Sixty hours per week were worked in this industry and all mines exceeded 250 days' operation.

Monthly fluctuation in number of men employed varied from 173 in February to 287 in June, the month of maximum employment.

## LIMESTONE QUARRIES.

### PRODUCTION.

During the year ending December 31, 1917, 10,671,697 tons of limestone were produced in Ohio quarries. This was 1,578,955 tons, or 12.9 per cent, less than total production reported for 1916. The short ton of 2,000 pounds is used in the following table, which summarizes by nature of use the disposition of the tonnage in each of these two years:

Disposition of Product.	Tons Produced.	
	1916 (116 quarries.)	1917 (113 quarries.)
Burned into lime.....	606,745(a)	813,036
Fluxing purposes .....	4,757,798	5,124,579
Cement .....	281,445	202,852
Macadamizing or ballast.....	5,610,798	3,286,396
Piers and protection purposes.....	76,486	31,195
Block or dimension stone.....	63	181
Ordinary building stone.....	42,370	82,481
Paving stone .....	330,644	49,264
Curbing .....	1,500	8,770
Miscellaneous purposes .....	542,803	1,072,943
Total .....	12,250,652(a)	10,671,697

(a) In addition to this, 48,735 tons of lime were reported for which no statement was made as to the amount of stone burned in its production.

The total production of lime was reported as 469,915 tons, an increase of 129,289 tons since 1916.

### NUMBER OF EMPLOYEES.

Employment in 112 limestone quarries varied from 2,377 employes in January to 3,722 in August, when the maximum of the year's employment was reached. This difference of 1,345 employes, is a variation of 36.1 per cent, or more than one-third, from the maximum number.

Numbers employed in each month of the year are shown below in comparative statement with similar figures for 1916:

Month.	Number of Employees on Pay-roll Nearest the 15th of Each Month.	
	1916 (118 quarries.)	1917 (112 quarries.)
January .....	2,786	2,377
February .....	2,998	2,516
March .....	3,164	2,754
April .....	3,824	3,053
May .....	4,116	3,440
June .....	4,289	3,542
July .....	4,217	3,485
August .....	4,444	3,722
September .....	4,399	3,487
October .....	4,166	3,256
November .....	3,850	2,954
December .....	3,126	2,435

## DAYS IN OPERATION.

One hundred and one establishments reported the number of days of operation of their quarries during the year. These have been classified as below:

<i>Days in Operation.</i>	<i>Number of Quarries Reporting.</i>
Less than 100.....	19
100 but under 150.....	23
150 but under 200.....	24
200 but under 250.....	13
250 but under 300.....	9
300 but under 314.....	9
314 and over.....	4
Total .....	101

## HOURS OF LABOR PER WEEK.

The normal hours of labor per week in 111 limestone quarries during 1917 were reported as follows:

<i>Normal Hours of Labor Per Week.</i>	<i>Number of Quarries Reporting.</i>
Under 48 .....	1
48 .....	2
Over 48 but under 54.....	3
54 .....	7
Over 54 but under 56.....	1
56 .....	1
58 .....	2
Over 58 but under 60.....	3
60 .....	84
Over 60 but under 66.....	3
66 .....	1
Over 66 but under 72.....	3

## WAGE AND SALARY PAYMENTS.

The total annual payroll reported for this industry was \$3,101,117 in 111 establishments as compared with \$2,706,862 during 1916 in 117 establishments.

## CLASSIFIED WEEKLY WAGE RATES.

The data presented in the following table covers 4,565 employes in all occupations on the payrolls of 111 quarries which reported classified wages for their week of greatest employment during the year ending December 31, 1917. Of the 4,424 male wage earners in these quarries, 55 per cent earned less than \$18 per week.

CLASSIFIED WEEKLY WAGES OF EMPLOYEES IN LIMESTONE QUARRIES FOR THE WEEK OF GREATEST EMPLOYMENT DURING THE YEAR ENDING DECEMBER 31, 1917.

Occupation.	Number of employees receiving each classified weekly wage.													
	Under \$4.	\$4 but under \$5.	\$5 but under \$6.	\$6 but under \$7.	\$7 but under \$8.	\$8 but under \$9.	\$9 but under \$10.	\$10 but under \$12.	\$12 but under \$15.	\$15 but under \$18.	\$18 but under \$25.	\$25 but under \$35.	\$35 and over.	Total.
Wage Earners—														
Males .....	2	4	2	9	6	19	21	110	609	1,004	1,590	343	45	4,424
Bookkeepers, Stenographers, and Office Clerks—														
Males .....	1	.....	.....	1	1	.....	2	5	5	24	30	19	10	98
Females .....	1	.....	3	5	1	.....	2	3	7	8	12	1	.....	43
Total .....	4	4	5	15	8	19	25	118	621	1,096	1,632	363	55	4,565

## SANDSTONE QUARRIES.

### PRODUCTION.

Forty-eight firms reported sandstone production during the year ending December 31, 1917. The various forms in which this production was marketed with the amount of stone used for each is summarized in the following table, where comparative data for 1916 are also shown:

Purpose for Which Used.	Unit of Measure.	Quantity Produced.	
		1916 (45 quarries.)	1917 (48 quarries.)
Rough building stone.....	Cubic feet .....	679,920	623,515
Sawed building stone.....	Cubic feet .....	696,183	783,042
Curbing .....	Cubic feet .....	1,248,494	884,907
Flagging .....	Cubic feet .....	1,019,492	849,317
Whetstones, oilstones, etc....	Gross .....	3,103	1,819
Grindstones .....	Tons (2,000 lbs.)..	44,547	48,071
Silica sand .....	Tons (2,000 lbs.)..	456,420	670,912
Miscellaneous purposes — (Includes stone for break- waters and lake filling, furnace lining, etc.).....	Tons (2,000 lbs.)..	335,179	126,458

### NUMBER OF EMPLOYEES.

Fifty firms reported the number of employes on the fifteenth of each month or for the payroll nearest the fifteenth. The monthly variation was as follows:

<i>Month.</i>	<i>Number of Employees.</i>
January .....	1,982
February .....	1,871
March .....	2,090
April .....	2,224
May .....	2,287
June .....	2,305
July .....	2,322
August .....	2,220
September .....	2,252
October .....	2,091
November .....	1,995
December .....	1,773

Maximum employment occurred in July when 2,322 employes were reported; this number decreased in December, the month of minimum employment, to only 1,773. The range of variation was, therefore, 549, or 23.6 per cent of the maximum number of employes.

#### DAYS IN OPERATION.

Forty-six firms reported the number of days during 1917 their quarries were in operation. In classified groups, their arrangement shows that one operated less than 100 day;; one, 100 but under 150 days; four, 150 but under 200 days; fourteen, 200 but under 250 days; twenty, 250 but under 300 days; five, 300 but under 314 days; and one, over 314 days.

#### HOURS OF LABOR PER WEEK.

Normal hours of labor per week in forty-nine quarries are classified as follows: in two, 48 hours; in eight, 54 hours; in one, over 54 but under 56 hours; in two, 58 hours; in three, over 58 but under 60 hours; and in thirty-three, 60 hours.

#### WAGE AND SALARY PAYMENTS.

Sandstone quarries paid out during 1917, \$1,586,697 in wages and salaries. During the preceding year, this industry reported \$1,268,304 in total wage and salary payments. Fifty firms filed returns for 1917: forty-four firms reported for 1916.

#### CLASSIFIED WEEKLY WAGE RATES.

Fifty quarries had a total of 2,561 employes in their week of greatest employment during 1917. Of these—

2,490 were wage earners.

71 were bookkeepers, stenographers and office clerks.

Of the wage earners, 888, or about one-third, earned less than \$15 per week; 1,850, or nearly three-fourths, earned less than \$18 per week; only 113, or approximately one-twentieth, received \$25 or more per week.

CLASSIFIED WEEKLY WAGES OF EMPLOYEES IN SANDSTONE QUARRIES FOR THE WEEK OF GREATEST  
EMPLOYMENT DURING THE YEAR ENDING DECEMBER 31, 1917.

Occupation.	Number of Employees Receiving Each Classified Weekly Wage.											Total.
	Under \$6.	\$6 but under \$7.	\$7 but under \$8.	\$8 but under \$9.	\$9 but under \$10.	\$10 but under \$12.	\$12 but under \$15.	\$15 but under \$18.	\$18 but under \$25.	\$25 but under \$35.	\$35 and over.	
Wage earners —												
Males .....	1	2	16	9	25	106	729	962	527	83	30	2,490
Bookkeepers, Stenographers and Office Clerks —												
Males .....			1		1		3	7	15	17	14	58
Females .....	2						6	3	2			13
Total .....	3	2	17	9	26	106	738	972	544	100	44	2,561



# DIRECTORY OF OHIO COAL MINES.

## ATHENS COUNTY

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
April Coal Co. ....	Nelsonville .....		
Athens Coal Co. ....	Athens .....		
Athens-Hocking Coal Co.	Nelsonville .....		
Beaumont Mining Co. ....	601 Commerce Bldg., Columbus .....		Beaumont
Big Bailey Coal Co. ....	Nelsonville .....	Big Bailey.....	
Black Diamond Coal Co. ....	701 New Hayden Bldg., Columbus .....		
Blackston, W. E. ....	Buchtel .....	Blackston .....	Buchtel
Brady, Jas. P. ....	R. D. 1 Nelsonville .....	Brady .....	Nelsonville
Buckeye Coal and Ry. Co..	Outlook Bldg., Columbus.	No. 10.....	Glouster
Canaan Coal Co. ....	Canaanville .....	Canaan .....	Canaanville
Carbondale Coal Co. ....	457 E. Main St., Chilli- cothe .....	No. 2.....	Carbondale
Chauncey Coal Co. ....	Nelsonville .....		
Consolidated Fuel Co. ....	C. of C. Bldg., Pitts- burgh, Pa. ....	Maple Hill.....	
D. E. M. B. Coal Co. ....	Nelsonville .....		
Day, Thos. ....	Amesville .....	Day .....	Amesville
Deer Coal Co. ....	99 Monroe St., Nelsonville.	York Clay 3....	Buchtel
Doanville Coal Co. ....	8 E. Broad St., Columbus.	Doanville .....	Doanville
East Hill Coal Co. ....	Nelsonville .....	No. 4.....	Buchtel
Gleason and White. ....	Nelsonville .....	S. C. No. 204...	
Graham & Rosser Coal Co.	16½ Public Sq. ....	Longstreth .....	Longstreth
Harper, D. W. ....	Nelsonville .....		
Harper Hollow Coal Co..	62 E. Washington St., Nelsonville .....		
Hazel Ridge Coal Co. ....	Nelsonville .....	Poston No. 1.. } Poston No. 2.. } Poston No. 3.. }	Floodwood
Herrold, J. A. ....	Nelsonville .....	Herrold .....	
Highland Coal Co. ....	R. D. 3, Nelsonville .....	No. 1.....	Nelsonville
Hisylvania Coal Co. ....	8 E. Broad St., Columbus.	No. 22..... } No. 23..... }	Trimble
Hocking Coal Co. ....	Logan .....		
Hocking Mining Co. ....	Athens Nat'l Bank Bldg., Athens .....	Del Carbo.....	Carbondale
Hocking Valley Fire Clay..	Nelsonville .....		Nelsonville
Hyde & Co. ....	Nelsonville .....		Nelsonville
Jacksonville Coal Co. ....	Athens .....		
Jennings, Albert G. ....	2 E. 82nd St., New York.		Utley
Jewett Coal Co. ....	Nelsonville .....	Jewett .....	Chauncey
Jones, E. L. ....	Nelsonville .....	Coe Hollow.....	
Juniper, C. W. ....	Nelsonville .....	Bald Knob.....	Nelsonville

## ATHENS COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Juniper Coal Co., Ed L....	231 Fayette St., Nelsonville .....	Scratchback .....	Nelsonville
Keeton & Johnson.....	Nelsonville .....	.....	Nelsonville
Keystone Coal Co.....	Carpenter Block, Nelsonville .....	No. 1.....	Nelsonville
Kimberly Coal & Land Co.	1101 Hayden Bldg., Columbus .....	Kimberly .....	Kimberly
Kontner & Son, C S.....	181 Milo St., Nelsonville... ..	.....	Nelsonville
Lama, J. M.....	Nelsonville .....	No. 4.....	Nelsonville
Lama, J. M.....	Nelsonville .....	No. 6.....	Nelsonville
Lama, J. M.....	Nelsonville .....	No. 6½.....	Nelsonville
Lampman & Juniper.....	116 15th Ave., Columbus.. ..	.....	Nelsonville
Lancaster & Son, Wm....	Nelsonville .....	.....	Nelsonville
Laurel Hill Coal Co.....	Nelsonville .....	.....	Nelsonville
Lewis & Son, John.....	Sharpsburg .....	.....	Sharpsburg
Louden, Earl .....	481 Scott St., Nelsonville. ....	.....	Nelsonville
Luhrig Collieries Co.....	8 E Broad St., Columbus. ....	.....	.....
Maple Hocking Coal Co..	1203 Chamber of Commerce Bldg., Pittsburgh, Pa. ....	Maple Hill.....	Nelsonville
Majestic Coal Co.....	P. O. Box 305, Nelsonville. ....	.....	Doanville
Martins & Summers Coal Co. ....	Nelsonville .....	.....	Chauncey
Meeker Run Coal Co.....	19½ Public Sq., Nelsonville. ....	.....	Kimberly
Minner Coal Co., Frank...	Nelsonville .....	.....	.....
Monitor Coal Co.....	565 Chestnut St., Nelsonville .....	.....	.....
Mound Hill Coal Co.....	R. D. 1, Nelsonville .....	.....	Doanville
Nelsonville Coal Co.....	48½ W. Washington, Nelsonville .....	.....	Nelsonville
New York Coal Co.....	8 E Broad St., Columbus. ....	No. 25.....	Chauncey
		No. 26.....	Floodwood
		No. 27.....	
		No. 28.....	
		No. 34.....	Nelsonville .....
		No. 31.....	Buchtel
		No. 35.....	
		No. 36.....	
		No. 40.....	.....
Nixon Coal Co., Bertha...	Nelsonville .....	.....	Nelsonville
Nixon-Edington Coal Co..	Nelsonville .....	.....	Myers Crossing
Northern Mining & Fuel Co. ....	Nelsonville .....	No. 24.....	Jacksonville
North Hill Coal Co.....	Millfield .....	North Hill.....	Millfield
Ohio Collieries Co.....	Ohio Bldg., Toledo.....	No. 209.....	Poston
		No. 210.....	
		No. 211.....	
		No. 254.....	Jacksonville
		No. 255.....	
		No. 281.....	

## ATHENS COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
		No. 266.....	Hollister
		No. 256.....	Glouster
		No. 267.....	
Packard Coal Mining Co..	239 N. High St., Columbus		
Pan-American Coal Co....	512½ Main St., Zanesville.	No. 28.....	Jacksonville
Phillips, F. P.....	112 E. State St., Athens..		Athens
Pittsburgh Coal Co.....	50 E. Broad St., Columbus	No. 9.....	Beaumont
		No. 10.....	Athens
Poston Coal Co., L. F.....	Athens	Schuler No. 4...	
Poston Consolidated Coal Co. ....	201 Lostro Bldg., Athens.	No. 6.....	Millfield
		No. 7.....	
Rice Mining Co.....	Mutual Home Sav. Bldg., Dayton	Rice	
Rice Mining Co., W. P....	708 Mutual Home Bldg., Dayton	Palos	Glouster
Rittenberry & Wallace....	Buchtel	Town Mine....	Buchtel
Robbins Coal Co., C.....	73½ Columbus St., Nelsonville	Robbins 1....	Nelsonville
		Robbins 2....	
		Robbins 3....	
		Robbins 4....	
Rosser, Eugene	Nelsonville		Nelsonville
Schuler & Sons, J. F.....	Sharpsburg		Broadwell
Semi-Wellston Coal Co....	Mineral	Jerk Water....	Mineral
Sharp, C. C.....	Glouster		Chauncey
Shay & Lawson.....	Nelsonville	Cars Run.....	Nelsonville
Shelton Bros.....	Nelsonville		Buchtel
Sheskey & Newman.....	Buchtel		Kimberly
Six-A Coal Co.....	Nelsonville		
Southern Fuel Co.....	Nelsonville		
Standard Coal Co.....	Nelsonville	No. 1.....	Floodwood
		No. 2.....	
		No. 3.....	
Standard Mining Co.....	801 Lindsay Bldg., Dayton		Carbondale
Sunnyside Coal Co.....	Nelsonville	Sunnyside	Myers Crossing
Taylor & Co., Arthur....	Buchtel	No. 5.....	Buchtel
Tedrow, C. S.....	Nelsonville	No. 1.....	Floodwood
		No. 2.....	
Thompson, John.....	Nelsonville	Adamson	Nelsonville
Tolliver & Bell Coal Co..	Nelsonville		Kimberly
Troy Coal Co.....	Nelsonville		
Virginia-Hocking Coal Co.	Sidney		Carbondale
Wagner & Schenz.....	Buchtel		Buchtel
Waterloo Coal Co.....	Athens	Waterloo	
Western Fuel Co.....	Nelsonville		
White Ash Coal Co.....	Nelsonville	White Ash	Chauncey
Whitmore, Ira M.....	Buchtel		

## ATHENS COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Wilson & Evans.....	276 W. Columbus St., Nelsonville .....	No. 2.....	
Woodland Coal Co.....	Nelsonville .....		
York Clay & Mining Co...	Nelsonville .....	Rainbow 1.....	} Buchtel
		Half Moon 2..	

## BELMONT COUNTY

Applegarth, E. E.....	Flushing .....	Pollock .....	Lafferty
		Conrow .....	Flushing
Arn, E. F.....	Holloway .....		Holloway
Atkinson Coal Co.....	Martins Ferry.....		
Ayers & Denbaugh.....	Barton .....		
Badger Mining Co.....	Bethesda .....	Badger .....	
Barton Coal Co.....	758 Rockefeller Bldg., Cleveland .....	New Taggart...	Barton
Beaver, Luther.....	R. D. 3, Bellaire.....	Wolfe .....	
Bellaire Coal Co.....	12th St., Bellaire.....	Long .....	
Bellaire Mining Co.....	Bellaire .....	No. 1.....	
		No. 2.....	
		No. 3.....	
		McClain .....	
Bethel, T. F.....	Flushing .....	Bethel .....	Flushing
Bixler Coal Co.....	1010 Columbus Savings & Trust Bldg., Columbus.	Cochran .....	Baileys Mills
Bridgeville - Barton Coal Co. ....	Bridgeville, Pa.....	Denham .....	
Brown, Edwin M.....	Martins Ferry .....	Laughlin .....	Martins Ferry
Buchanan, Geo.....	Tiltonsville .....	Deep Run.....	Tiltonsville
Burdette, C. P.....	Barnesville .....	Ault .....	
Burlington Coal Co.....	Martins Ferry.....		Martins Ferry
Cambria Collieries Co....	Ohio Bldg., Toledo.....	Pultney .....	} Bellaire
		Webb .....	
Captina Coal Co.....	Armstrong Mills.....	Captina .....	Armstrong Mills
Carnegie Steel Co.....	Carnegie Bldg., Pitts- burgh, Pa.....	Carnegie Mill...	Bellaire
Caruth Bros.....	Bellaire .....	Caruth .....	Bellaire
Central Coal Mining Co...	307-9 Rockefeller Bldg., Cleveland .....	Clifford .....	Dilles
Chini & Chini.....	Flushing .....	Tyrol .....	Flushing
Christy Coal Co.....	St. Clairsville.....	No. 16.....	Maynard
Clarkson Coal Mining Co.	712 Rockefeller Bldg., Cleveland .....	No. 1.....	St. Clairsville
Cleveland - Belmont Coal Co. ....	618 Hickox Bldg., Cleve- land .....	No. 2.....	Fairpoint
Colburgh Coal Co.....	8 E. Broad St., Co- lumbus .....	Va. Hill No. 1..	Lafferty
		Media .....	Baileys Mills
		Murphy .....	
Conrow, Ed. ....	Flushing .....	Conrow .....	Flushing
Consumers Coal Co.....	Bridgeport .....		Bridgeport

## BELMONT COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Crabapple Coal Co.....	1606 Union Nat'l Bank Bldg., Cleveland.....		
Crossley, H. N.....	Blaine .....		Blaine
Davey, Chas.....	Barnesville .....		Barnesville
Davey, Thomas.....	Barnesville .....		Barnesville
Deep Run Coal Co.....	Yorkville .....		
Denbaugh, Frank.....	Barton .....	A & D.....	Barton
Denham, Clarence.....	Bridgeport .....		Barton
Dolen Coal Co.....	Morristown .....		
Donley, Geo. W.....	Bellaire .....		Moors Run
Doughty, D. E.....	Martins Ferry.....		Martins Ferry
Emergency Coal Co.....	Neffs .....	Emergency .....	Neffs
Fairpoint & W. Va. Coal Co. ....	Fairpoint .....	Ideal .....	Fairpoint
Fairview Coal Co.....	Rockefeller Bldg., Cleveland .....	Fairview .....	Crescent
Fitzgerald, Wm.....	Bridgeport .....	Aetna-Standard .....	Bridgeport
Froelich, Edw. J.....	R. D. 4, Barnesville.....		Barnesville
Fry & Brooks Coal Co....	Bellaire .....	Gilhooley .....	
Gallagher, Chas.....	Barton .....	Hardesty .....	Barton
Gallagher, J. S.....	Barnesville .....	Davison .....	
Georgetown Coal Co.....	619 Guardian Bldg., Cleveland .....		Georgetown
Gilhooley, Patrick.....	Bellaire .....	Pinch Run.....	
Glen Run Domestic Coal Co. ....	Martins Ferry.....		
Great Lakes Coal Mining Co. ....	50 E. Broad St., Columbus .....	No. 3.....	} Maynard
		No. 4.....	
		No. 5.....	
Green, H. S.....	Powhatan .....	Cat Run.....	Powhatan
Grimsley, A. M.....	Flushing .....		Flushing
Harwath, Joe.....	Maynard .....		Maynard
Hess & Clark.....	Neffs .....		Neffs
Holloway Coal Co.....	818 Engineers' Bldg., Cleveland .....	Locust .....	Flushing
Hosenfield, Jos.....	Box 178, Martins Ferry .....		
Huffman & Hunt.....	Bridgeport .....	Brookside .....	
Hughes, Wm.....	Dillonvale .....		Dillonvale
Hutchinson Coal Co.....	Fairmont, W. Va.....	Kirkwood .....	Bridgeport
Industrial Coal & Coke Co.	Martins Ferry.....		
Inland Coal Co.....	Barton .....		
Irving Coal Co.....	Bellaire .....	Rail & River 2..	Bellaire
Jeanette Coal Co.....	Heinlein Bldg., Bridgeport .....		
Jenkins, Evan.....	Maynard .....	Jenkins .....	Maynard
Jenree, Gilbert W.....	Tiltonsville .....	Applegarth .....	
Jewell, D. E.....	Bannock .....	Lodge .....	Bannock
Jorden Coal Co.....	Lafferty .....	Clyde .....	Lafferty

## BELMON COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Kennon Coal & Mining Co.	1004 Citz. Bldg., Cleveland	Kennon	Flushing
Kennon, R. J.	Barnesvilles		Barnesville
Kimble, J. L.	Mt. Pleasant		Mt. Pleasant
Kirkwood Coal Co.	Bellaire	No. 2	
Klee, Alva	R. D. 2, Bellaire		Bellaire
Knote, G. T.	410 German Bank Bldg., Wheeling, W. Va.	Powhatan	Powhatan Point
Koehnline, Jas. A.	Bridgeport		
Kosky, Paul	R. D. 1, Martins Ferry		Martins Ferry
Lake Shore Coal Co.	758 Rockefeller Bldg., Cleveland	Lake Shore	Barton
Leah Coal Co.	R. D. 2, St. Clairsville		St. Clairsville
Lewis & Matthews	Martins Ferry		
Lewis, S. K.	Box 463, Wheeling, W. Va.		Martins Ferry
Liberty Coal Co.	758 Rockefeller Bldg., Cleveland		Stewartsville
Lorain Coal & Dock Co.	Columbus	Crescent	Crescent
		Wheeling Creek	Bridgeport
		Lansing	Lansing
		Blaine	Blaine
Lynn, Wm. C.	Bethesda	Roby	Bethesda
		Badger	
McBurney, Geo.	R. D. 1, Barnesville	McBurney	Barnesville
McCartney, F. W.	Hendrysburg		Hendrysburg
Massillon - Belmont Coal Co.	Massillon	Bethel 1	Flushing
Maynard Coal Co.	Maynard	Berry	Maynard
Mazers, Everett	Hendrysburg	Mazers	Hendrysburg
Meister Coal Co.	Flushing	Alice	Lafferty
Minder, Wm.	Bethesda	Gill	Bethesda
Morgan Coal Co., A. J.	Bellaire	Franklin	Stewartsville
		Talpin	Bannock
		Johnson	Dilles Bottom
Myers & Porter Coal Co.	Neffs		
National Coal Co.	Cambridge	Lewis	
Neff, Alexander	Neffs	Coal Brook	Neffs
Neff & Robinson Coal Co.	Bellaire		Bellaire
Nicholis, John	Barnesville		
North Belmont Coal Co.	758 Rockefeller Bldg., Cleveland	Tunnel	Flushing
Oco Coal Co.	244 Main St., Wadsworth		
Ohio Consolidated Coal Co.	Bellaire	Ohio	Stewartsville
Ohio & Penna. Coal Co.	1210 Williamson Bldg., Cleveland	Walnut Hill	Yorkville
Ohio & W. Va. Coal Co.	412 S. Front St., Wheeling, W. Va.		
Paisley Co., J. A.	Stewartsville	Lucy	

## BELMON COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Paxton Co., J. A.....	1101 Schmulbach Bldg., Wheeling, W. Va.....	Brooks Run 1...	Bellaire
Paxton & Weidetx Coal Co. ....	Martins Ferry.....		
Pittsburgh - Belmont Coal Co. ....	Bellaire .....	Neffs 1..... Neffs 2.....	Neffs
Pittsburgh & Cleveland Coal Co.....	514 Leader-News Bldg., Cleveland .....	Gaylord 1..... Gaylord 2.....	Martins Ferry
Pittsburgh & Ohio Coal Co.	Stewartsville .....	Liberty .....	Stewartsville
Pittsburgh Superior Coal Co. ....	Shadyside .....	Cook .....	Shadyside
Pollock, Calvin.....	Lafferty .....		Lafferty
Poss, John.....	Maynard .....		Maynard
Progress Coal Co.....	1257 Leader News Bldg., Cleveland .....	Pauline .....	Bannock
Progressive Coal Co.....	36th & Mound Sts., Bel- laire .....	Morgan .....	Bellaire
Pursglove-Maher Coal Co.	223 Rockefeller Bldg., Cleveland .....	Lydia .....	Maynard
		Maher .....	Glencoe
		Pursglove .....	Stewartsville
		Willow Grove 1 } Willow Grove 2 } Heinlein .....	Neffs
Rail & River Coal Co.....	744 Rockefeller Bldg., Cleveland .....	No. 1..... No. 3..... No. 6.....	Bellaire Dilles McClainsville
Reddington, Thos.....	Holloway .....		Holloway
Rinkes, Peter.....	R. D. 1, St. Clairsville...		
Roby-Somers Coal Co.....	521 Cuyahoga Bldg., Cleveland .....	Lorena .....	Adena
Rosamond, H. D.....	Hendrysburg .....		Hendrysburg
Rosemary Coal Co.....	229 Rockefeller Bldg., Cleveland .....	Rosemary .....	Flushing
St. Marys Coal Co.....	Bellaire .....	Kirkwood 2....	
Schick Coal Co., G. E.....	Bellaire .....	Black Oak.....	Bellaire
Schick Co-operative Coal Co. ....	Bellaire .....		Bellaire
Shadyside Coal Co.....	Shadyside .....	Wolforth .....	
Sheetz Coal Co.....	Martins Ferry.....		Martins Ferry
Shephard, Ben.....	Lafferty .....		Lafferty
Shipe, J. L.....	Barnesville .....		
Skaggs, E. D.....	Bethesda .....		Bethesda
Slater & Embleton.....	Blaine .....	Eureka .....	Blaine
Spradling, Edw.....	3070 Washington St., Bel- laire .....		Bellaire

## BELMONT COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Stachina, Joe.....	Bridgeport, R. D. 2.....		Bridgeport
Standard Stone and Fire Brick Co.....	Bellaire .....	Klondyke .....	
Stark and Ohio Mining Co.	307 New Vicary Bldg., Canton .....		
Stilwell, F. R.....	Maynard .....		Maynard
Sutton, J.....	Lafferty .....	Sutton .....	Lafferty
Szec, Steve.....	Maynard .....		Maynard
Taylor, Henry.....	St. Clairsville.....		St. Clairsville
Thomas Coal Co., D. H...	Rockefeller Bldg., Cleve- land .....	Lucy .....	Stewartsville
Thomas Coal, D. H.....	St. Clairsville.....	Tallett .....	Stewartsville
Troll Coal Mining Co....	St. Clairsville.....	No. 1.....	Maynard
		No. 2.....	
		No. 4.....	
Ulrich, John.....	R. D. 3, Barnesville.....		Barnesville
Valley Camp Coal Co....	Rockefeller Bldg., Cleve- land .....	Columbia .....	Fairpoint
Wargo Coal Co.....	Bellaire .....		
West Wheeling Coal Co...	Bridgeport .....		Bridgeport
Wheeling & Lake Erie Coal Mining Co.....	1300 Leader-News Bldg., Cleveland .....	Dillon 5.....	Flushing
Wheeling Township Coal Mining Co.....	St. Clairsville.....		
Whitaker-Glessner Co....	Wheeling, W. Va.....	Laughlin .....	Martins Ferry
White, C. B.....	Flushing .....	White .....	Flushing
Whitley, W. M.....	120 N. 4th St., Martins Ferry .....	McClainesville ..	Neffs
Witchey Brs. Coal Co...	R. D. 2, Flushing.....	Rose .....	Neffs
Wolf, W. H.....	Bellaire, R. D. 3.....		
Yorkville Coal Co.....	1101 Schmulbach Bldg., Wheeling, W. Va.....	Heil .....	Yorkville
Youghiogheny & Ohio Coal Co.....	1240 Leader-News Bldg., Cleveland .....	Barton .....	Barton
		Boggs .....	Barton
		Maple Hill.....	
		Delora .....	
		Eleanor .....	Warnock
		Florence .....	Martins Ferry

## CARROLL COUNTY

Big Four Clay Co.....	606 City Nat'l Bank Bldg., Canton .....	Big Four Drift.	Malvern
C. & B. Clay Co.....	Canton .....		
Carroll County Coal Co...	908 Dennison Ave., Cleve- land .....		
German & Sons, D. S.....	Sherrodsville .....	No. 4.....	Sherrodsville
Gorrell, John W.....	Malvern .....		



## CARROLL COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Hoover, Fred G.....	Mineral City.....		
Huff Run Coal Co.....	518 Renkert Bldg., Canton .....	Maple Hill.....	Mineral City
Interstate Mining Co.....	603 Flatiron Bldg., Akron.	Tripp .....	
James Bros. Coal Co.....	Magnolia .....	James .....	Magnolia
McCartney, E. E.....	Youngstown .....		
Magnolia Coal Co.....	Mineral City.....	Hickory .....	Mineral City
Malvern Fire Clay Co.....	Malvern .....	Pipe Run.....	Malvern
Medal Paving Brick Co....	1307 Sweetland Bldg., Cleveland .....	Sandy Valley....	Malvern
Metropolitan Paving Brick Co. ....	Renkert Bldg., Canton....		Minerva
Morgan & Son, Samuel....	Sherodsville .....		Sherodsville
Nat'l Fire Proofing Co....	Pittsburgh, Pa.....	Magnolia .....	Magnolia
Ohio Mining & Ry. Co....	Mineral City.....	Clover Leaf....	Mineral City
Preston, H. E.....	Leesville .....		
Robinson Clay Product Co.	1010 E. Market St., Akron	No. 5.....	Malvern
Scourfield & Jenkins.....	Sherodsville .....	Gamble .....	
Stadler Rendering & Fertilizer Co.....	908 Denison Ave., Cleveland .....	Stadler .....	Sherodsville
Sterling Coal Co.....	929 Leader-News Bldg., Cleveland .....	Sterling .....	Salineville
Storm-Loomis Coal Co....	403 Martin Bldg., Canton.	Kirk .....	Salineville
Tripp, Chas. E.....	Bowerstown .....		Bowerstown
Van Kirk Coal & Mining Co. ....	Mineral City.....	Kempthorne ... } Kester .....	Dell Roy
Whitacre-Greer Fireproofing Co.....	Waynesburg .....	Midway .....	Waynesburg
Wynn Coal Co., E. P.....	Harris Bldg., Canton....	Prosser .....	Dell Roy
Yealey, A. E.....	Carrollton, R. D. 3.....		Carrollton

## COLUMBIANA COUNTY

American Sewer Pipe Co..	15 Broad St., Akron.....	American Clay...	Lisbon
Auld & Sons, R.....	Salem .....		
Barrett, C. W.....	East Liverpool.....	Calcutta .....	East Liverpool
Beaver Coal Co.....	1216 Sweetland Bldg., Cleveland .....		Lisbon
Big Vein Coal Co.....	1257 Leader-News Bldg., Cleveland .....	Garside .....	Salineville
Bower, J. C.....	New Waterford.....		
Briar Hill Coal Co.....	Lisbon .....	Briar Hill.....	Lisbon
Canton-Akron Coal Co....	New Waterford.....		
Card & Prosser Coal Co...	1201 Leader-News Bldg., Cleveland .....	West Pittsburgh.	Teegarden
Columbiana Coal & Clay Co. ....	1524 Chestnut St., Philadelphia, Pa.....	Columbia .....	Salineville
Conlin, Frank.....	Salineville .....	Conlin .....	Salineville

## COLUMBIANA COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Crook & Son, Geo. W.....	New Waterford, R. D. 1.		New Waterford
Dorr & Sons, S. P.....	Kensington		Kensington
Dyekt & Son.....	New Waterford.....	Bower	New Waterford
Elk Run Coal Co.....	63½ Main St., Salem.....	Elk Run	Rogers
Ellis, J. B.....	New Waterford.....	Reynolds	New Waterford
Enos, Geo. A.....	1444 Rockefeller Bldg., Cleveland	Strabley	Salineville
Grant Coal Co.....	357 Leader-News Bldg., Cleveland	Grant	Salineville
Harsh, Erven.....	Kensington		Kensington
Hartzell, Robt.....	Salem, R. D. 3.....	Highland	Teegarden
Hill Coal Co., W. S.....	East Palestine, R. D. 1.....		
Jones Coal Co.....	27 W. Main St., East Palestine	Jones	East Palestine
Jones & Co., Chas.....	East Palestine.....	No. 3.....	East Palestine
Jones & Wilson.....	Salem		
Keets, E. J.....	Salem, R. D. 3.....		Salem
Kendal Coal Mining Co...	Salineville	Strabley 1.....	Salineville
Kinsey, Zebulen B.....	I. O. O. F. Bldg., East Liverpool		
Kirk Coal Co.....	Salineville		
Kirk-Dunn Coal Co.....	1216 Swetland Bldg., Cleveland	Rhea 1..... Rhea 2.....	Lisbon
Lewis & Co., W. R.....	Box 817, Lisbon.....		
Lewis & Evans.....	Lisbon	Reed	
Little Beaver Clay Co....	East Palestine.....		
McLain Fire Brick Co.....	508 Fulton Bldg., Pitts- burgh, Pa.....	Colonial 6.....	Irondale
McGarvey, J. W.....	Wellsville	Cold Springs	Wellsville
McGrew Coal & Clay Co..	Elkton	Rock Camp 1-2..	Elkton
Negley Coal Co.....	Negley	No. 2	Negley
Neiheisel, Elizabeth.....	Leetonia		Leetonia
New Waterford Mining Co. ....	New Waterford.....		New Waterford
Papania & Ferris.....	New Waterford.....		
Pine Hill Coal Co.....	Lisbon		
Reese & Son, John T.....	Salem	Beech Hollow...	Salem
River Ridge Coal Co.....	307 Rockefeller Bldg., Cleveland	Diamond	Yellow Creek
Salem Mining Co.....	81 Main St., Salem.....		Salem
Saratoga Fire Clay Co....	Lisbon	C. & P. Clay....	
Smith, Daniel M.....	Wellsville, R. D. 2.....	Coal Hollow.....	Wellsville
Sterling Coal Co.....	929 Leader-News Bldg., Cleveland	Delmore	Leetonia
Tullis, E. L.....	Rogers		
United Iron & Steel Co...	1300 Leader-News Bldg., Cleveland		Leetonia
Vasey, Sarah J.....	Salineville	Vasey	Salineville

## COLUMBIANA COUNTY—Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Ward, Wm. A.....	44 E. Martin St., East Palestine .....	Ward .....	East Palestine
Wellsville Coal & Supply Co. ....	Wellsville .....	McGough .....	
Wilson-Beegle Coal Co....	1504 Keenan Bldg., Pittsburgh, Pa.....	Old State Line..	East Palestine
Wooster Fire Clay Co....	225 Clark Ave., Wellsville .....	Wooster .....	Wellsville

## COSHOCKTON COUNTY

Aronhalt, Jos. C.....	Coshocton, R. D. 4.....	No. 2.....	Coshocton
Banks, Rolla.....	Coshocton, R. D. 4.....	Chestnut Hill....	Coshocton
Barnes Coal & Mining Co..	3rd & Main Sts., Coshocton .....	No. 1.....}	Conesville
		No. 2.....}	
Bedford Coal By-Products Co. ....	601 Bank of Commerce Bldg., St. Louis, Mo....	Wegley .....	Coshocton
Blackson & Freeman.....	Conesville .....	Oden Valley No. 3	Conesville
Blackson & Miller.....	R. D. 2, Coshocton.....		Coshocton
Caley, C. S.....	R. D. 4, Coshocton.....	Caley .....	Coshocton
Clough & Rectler.....	Coshocton .....	Hollyhock .....	Coshocton
Columbus Coal & Mining Co. ....	Gomley Bldg., Coshocton.	Franklin No. 2..	Coshocton
Conklin, L. H.....	432 Main St., Coshocton..	Willow Brook...	Conesville
Conley, Geo.....	R. D. 2, Coshocton.....		Coshocton
Davis Coal Co.....	Conesville .....	Tyrone .....	Coshocton
Dawson & Senter.....	Conesville .....		Conesville
Dennis, R. B.....	115 S. Fourth St., Coshocton .....	Locust Grove....	Coshocton
Eckels, R. M.....	Denman Ave., Coshocton.		Coshocton
Emler, Atta.....	R. D. 5, Coshocton.....		Coshocton
Foster, Frank M.....	West Lafayette.....	Zellars .....	West Lafayette
Gillen, James H.....	Roscoe .....	Treadway .....	Roscoe
Greer, Robert.....	Roscoe .....	Little Daisy....	Roscoe
Hackenbrasht, Geo.....	Newcomerstown .....		Newcomerstown
Hall Coal Co.....	Box 82, Coshocton.....	Hall .....	Coshocton
Hall & West.....	Roscoe .....	Hudson .....	Roscoe
Hudson, Don.....	624 Cambridge St., Coshocton .....		Coshocton
Infield, Wm. ....	Coshocton .....	Infield .....	Coshocton
Ingham Bros.....	Coshocton .....	Burt .....	Coshocton
Jennings, W. O.....	R. D. 4, Coshocton.....		Coshocton
Knarr, G. W.....	424 S. Broadway, Wheeling, W. Va.....		
Lafayette Stamping & Enameling Co.....	West Lafayette.....		
Lillibridge Bros.....	Conesville .....	Perry .....	Conesville
Lyons, J. E.....	239 W. Main St., Coshocton .....	Clark .....	Coshocton

## COSHOCOTON COUNTY—Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
McGiffin, J. A.....	Isleta .....	.....	Isleta
Marack, Frank.....	Coshocton .....	.....	Coshocton
Marquand, Harold M.....	Adams Mills.....	.....	
Morgan Run Coal & Mining Co.....	115 S. Fourth St., Coshocton .....	No. 3.....	Coshocton
		No. 4.....	
Oden Valley Coal Co.....	Coshocton .....	Oden Valley.....	Coshocton
Ohio Block Cannel Coal Co. ....	819 Nicholas Bldg., Toledo .....	Ohio Block.....	Warsaw
Patton & Barnes.....	Coshocton .....	Rock Run No. 2.....	Coshocton
Power Coal Co.....	Coshocton .....	Power .....	Coshocton
Ramsey, Bert.....	Coshocton .....	.....	Coshocton
Ricketts, Jno. H.....	Coshocton .....	.....	
Robson, Jos.....	R. D. 4, Coshocton.....	.....	Coshocton
Ross & Son Coal Co., M.....	Coshocton .....	.....	
Saxon, Chas.....	Coshocton .....	.....	
Senter, C. W.....	Coshocton .....	No. 4.....	Coshocton
Shaffer, Howard.....	R. D. 5, Coshocton.....	Syndicate .....	
Staggers, H. H.....	Conesville .....	.....	Conesville
Treasure, Jos.....	Isleta .....	.....	Isleta
Valley Coal Co.....	914 Rockefeller Bldg., Cleveland .....	Valley .....	Coshocton
Warwick Coal Co.....	914 Rockefeller Bldg., Cleveland .....	No. 4.....	Coshocton
		No. 5.....	
West, Chas.....	926 Orange St., Coshocton.....	Old Hay.....	Coshocton
Williams, Thos.....	R. D. 4, Coshocton.....	Conley .....	Coshocton
Wolford, M. S.....	Coshocton .....	Plain View.....	Coshocton
Wood, J. G.....	761 S. 7th St., Coshocton.....	.....	Coshocton

## GALLIA COUNTY

Bowers, Geo. E.....	Middleport .....	.....	Middleport
Brechtel, Peter.....	Cheshire .....	Story Run.....	Cheshire
Carson, H. L.....	R. D. 1, Middleport.....	Carson .....	Rutland
Darst, N. L.....	Cheshire .....	.....	Cheshire
Elliott, Wm.....	Bladen .....	.....	Bladen
Ely, W. C.....	R. D. 2, Cheshire.....	.....	Kyger
Gardner, S. G.....	Gallipolis .....	.....	
Halfhill, Jno.....	R. D. 2, Cheshire.....	Blue Sulphur....	Cheshire
Hartsook, G. W.....	R. D. 3, Vinton.....	.....	Vinton
Haskins, W. C.....	R. D. 4, Gallipolis.....	.....	Gallipolis
Kennedy, Freeman.....	Cheshire .....	.....	Cheshire
Kerns, J. N.....	Angel .....	.....	Angel
Lemley, Andrew S.....	R. D. 1, Cheshire.....	.....	Kyger
Lewis, A.....	Angel .....	.....	Angel
Lewis, Samuel.....	Bladen .....	.....	Bladen
McClaskey, T. M.....	15 Neil Ave., Gallipolis...	Turkey Run.....	Gallipolis

## GALLIA COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Matthews, David.....	Cheshire .....	.....	Cheshire
Myers, Virginia E.....	1st Ave., Gallipolis.....	Giant .....	Cheshire
Phillips, Andrew.....	Bladen .....	.....	Bladen
Porter, John T.....	Bladen .....	Porters .....	Bladen
Ralph, F. B. & Matthews, Cline .....	Vinton .....	.....	.....
Ridenour & Shafer.....	794 Chestnut St., Nelson- ville .....	.....	Cheshire
Rife, Horton.....	Cheshire .....	.....	Cheshire
Rife, Stanley.....	Kyger .....	.....	Kyger
Rife, William.....	Cheshire .....	.....	Cheshire
Shuler & Mulford.....	Cheshire .....	.....	Cheshire
Simms, Elias.....	Kyger .....	.....	Kyger
Sisson, Frank.....	R. D. 2, Cheshire.....	.....	Cheshire
Straight, John A.....	Northup .....	.....	Northup
Strait, J. J.....	R. D. 1, Patriot.....	.....	Patriot
Swan Creek Mining Co...	Glouster .....	.....	Klondyke Bladen
Thomas, S. W.....	R. D. 1, Cheshire.....	.....	.....
Thompson, J. S.....	Cheshire .....	.....	Cheshire
Vankirk, Hollis.....	R. D. 2, Cheshire.....	.....	Cheshire

## GUERNSEY COUNTY

Akron Coal Co.....	Akron Savings & Loan Bldg., Akron.....	Good Year..... Kings .....	Kipling
		Klondyke .....	
		Murray Hill....	
		Indian Camp....	
Birds Run Coal Co.....	Birds Run .....	.....	.....
Bishard, Grant.....	R. D. 6, Cambridge.....	.....	Cambridge
Blount & Meredith.....	Byesville .....	.....	.....
Burris, J. E.....	R. D. 4, Cambridge.....	Deep Cut.....	Cambridge
Burt, D. S.....	Byesville .....	Sugar Point....	Byesville
Burt, W. C.....	718 S. 9th St., Cambridge	Stoner .....	Cambridge
Cambridge Collieries Co..	1050 Rockefeller Bldg., Cleveland .....	Banner .....	Pleasant City
		Blue Bell.....	
		Buffalo .....	
		Hartford .....	
		Walhounding No. 2.....	Buffalo
		Ideal .....	Byesville
		Trail Run No. 1)	Robins
		Trail Run No. 2)	
Cambridge Glass Co.....	Cambridge .....	Elm Tree.....	Cambridge
Campbell, Chas. R.....	111 W. Washington St., Chicago, Ill.....	.....	.....
Cassell Coal Co.....	Cambridge .....	.....	.....
Coal Ridge Mining Co....	829 Rockefeller Bldg., Cleveland .....	Cambridge .....	Cambridge

## GUERNSEY COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Eldon Coal Co.....	Spencer Station.....		
Eyer Coal Co., Patrick....	Box 544, Altoona, Pa....	Noah Long.....	
Federal Cambridge Coal Co. ....	Cambridge .....	Leatherwood ...	Cambridge
Fletcher & Dodd.....	Byesville .....	Wilsons .....	Byesville
Forsythe Coal Co.....	951 Wheeling Ave., Cambridge .....	Forsythe .....	Cambridge
Fowler, H. L.....	R. D. 1, Salesville.....	Fowler .....	
Fulton, J. C.....	Fulton .....		Fulton
Galloway, E. B.....	Quaker City .....		Quaker City
Gibson, Port E.....	Cambridge .....	Murray .....	
Guernsey Coal Mining Co.	Cambridge .....		
Haines-Perry .....	R. D. 2, Cambridge.....	Haines .....	Cambridge
Harris Bros. Coal Co.....	533 Steub Ave., Cambridge .....	Liberty .....	Cambridge
Keenan, Mrs. C. E.....	Quaker City.....		
Kelley, W. S.....	Salesville .....		Salesville
Kimbolton Coal Mining Co. ....	404 Park Bldg., Cleveland .....	Pigeon Gap.....	Cambridge
		Walters .....	Kimbolton
Lloyd, John .....	301 N. 7th St., Cambridge		Cambridge
McConnel, Chas.....	R. D. 8, Cambridge.....		Cambridge
McManaway, Geo.....	Cambridge .....		Cambridge
Macadam Coal Co.....	Byesville .....	Valley .....	Byesville
Matthews Coal Co.....	1026 Beatty Ave Cambridge .....	Ohio No. 1.....	Cambridge
Midland Coal Co.....	120 N. Second St., Byesville .....	Midland .....	Byesville
Montgomery, J. W.....	Quaker City.....		Quaker City
Morris Coal Co.....	906 Citizens Bldg., Cleveland .....	Black Top.....	Lore City
		Cleveland .....	Senecaville
National Coal Co.....	1500 Rockefeller Bldg., Cleveland .....	Little Kate No. 1 } Harryette ..... } Minnehaha .... }	Byesville
		Little Kate No. 2	Blue Bell
Neishar, Andy.....	R. D. 2, Salesville.....		Salesville
Nicholson, W. F.....	R. D. 6, Cambridge.....	Mineral Point...	Cambridge
Nicholson Clay Products Co. ....	Central Nat'l. Bank Bldg., Cambridge .....		Byesville
Nyce Coal Co.....	Byesville .....	Beach Grove....	Byesville
Puritan Coal Co.....	Cambridge .....		Derwent
Reid, Homer.....	R. D. 1, Salesville.....	Lime .....	Salesville
Reitler, Fritz.....	R. D. 1, Byesville.....		
Reitler, George.....	600 Hyatt Ave., Cambridge .....		Cambridge
Republic Coal Co.....	217 N. 8th St., Cambridge	Little Anna.....	Byesville

## GUERNSEY COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Riley, Peter.....	Kimbolton .....	Bramger .....	Kimbolton
Smith Bros.....	Byesville .....	.....	.....
Stevens, George.....	Kimbolton .....	Mong .....	Kimbolton
Sugar Tree Coal Co.....	Alliance .....	Sugar Tree.....	Byesville
Wayne Mining Co.....	400 Union Elec. Bldg., St. Louis, Mo.....	Mary Jean.....	Cambridge

## HARRISON COUNTY

Adams, Roy H.....	R. D. 2, Cadiz.....	.....	Cadiz
Anderson, R. H.....	Cadiz .....	.....	Cadiz
Apex Coal Co.....	629 Rockefeller Bldg., Cleveland .....	Apex No. 1.....	Germano
Baker, R. M.....	Cadiz .....	.....	Cadiz
Bates-Williams Coal Co...	Hopedale .....	.....	Hopedale
Bigger, Wm.....	R. D. 6, Cadiz.....	.....	Cadiz
Boals, Wm. R.....	Hopedale .....	Long View.....	Hopedale
Brown, Chas. R.....	R. D. 1, Uhrichsville.....	.....	.....
Cambridge Collieries Co...	1050 Rockefeller Bldg., Cleveland .....	Majestic .....	Blairmont
Campbell, J. H.....	Cadiz .....	.....	Cadiz
Christopher, T. B.....	R. D. 3, Cadiz.....	.....	Cadiz
Crab Orchard Mining Co..	8 E. Long St., Columbus.	Crab Orchard...	Freeport
Culbertson, F. S.....	New Athens.....	.....	New Athens
Culbertson Coal Co.....	614 Stambaugh Bldg., Youngstown .....	No. 1.....	Adena
Czatt, M. S. & G. N.....	Bowerstown .....	.....	Bowerstown
Dunlap, S. P.....	R. D. 1, Cadiz.....	.....	Cadiz
Fleming, G. O.....	Jewett .....	.....	Jewett
Freeport Coal Co.....	Freeport .....	.....	Freeport
Freshwater, J. W.....	R. D. 6, Cadiz.....	McGrew .....	Cadiz
Great Lakes Coal Mining Co. ....	50 E Broad St., Co- lumbus .....	No. 1.....	Robyville
Hamnett, James H.....	Cadiz .....	.....	Cadiz
Harmon Creek Coal Co...	1523 Oliver Bldg., Pitts- burgh, Pa.....	Howard .....	Hopedale
Henderson & Hennen.....	R. D. 8, Cadiz.....	.....	Cadiz
Hildreth, A. B.....	Cadiz .....	Kannel .....	Cadiz
Hine, O. C.....	Cadiz .....	.....	Cadiz
Hitchcock, S. G.....	R. D. 1, Uhrichsville.....	.....	.....
Hoobler, Morris.....	Germano .....	.....	Germano
Hopkins, D. S.....	R. D. 7, Cadiz.....	.....	Cadiz
Hutson Coal Co.....	911 Park Bldg., Cleveland	Custer .....	Hopedale
Jankoioiko, Stony.....	Adena .....	.....	.....
Kane, J. J.....	Cadiz .....	.....	Cadiz
Keesey, J. L.....	R. D. 4, Cadiz.....	.....	Cadiz
Kerr & Son, Jas. W.....	317 N. Muskingum St., Cadiz .....	.....	Cadiz
Kuhn & Burrier.....	Germano .....	.....	Germano
Long, Robert.....	Cadiz .....	.....	Cadiz

## HARRISON COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Love, Hartzell.....	New Athens.....		
McGrew, J. S.....	R. D. 6, Cadiz.....		Cadiz
Massillon Coal Mining Co.	McClymonds Bldg., Mas-		
	sillon .....	Rose Valley ...	
Mills, Elias.....	Moorefield .....		Moorefield
Moore, J. D.....	Short Creek .....		Short Creek
Morris, A. J.....	R. D. 8, Cadiz.....		Cadiz
Mull, Loyd B.....	Jewett .....		Jewett
Neff, E. J.....	308 S. Broadway, New	Briar Hill ....	Tippecanoe
	Philadelphia .....		
Newton Coal & Mining Co.	W. Grant St., Dennison..	Newton .....	Bowerstown
Ohio-Wheeling Coal Co...	Wheeling, W. Va.....	No. 1 .....	Harrisville
Phillips, Chas.....	R. D. 2, Cadiz.....		Cadiz
Pickering, C. C.....	Cadiz .....		Cadiz
Pittsburgh Block Coal Co.	519 Oliver Bldg., Pitts-		
	burgh, Pa.....	Kenwood .....	Blairmont
Sheets, Wm.....	230 N. Main St., Cadiz...		Cadiz
Short Creek Coal Co.....	623 Guardian Bldg.,	No. 1 } .....	Adena
	Cleveland .....	No. 2 } .....	
		No. 3 } .....	
Stellar Coal Mining Co...	Adena .....		
Stillwater Coal Mining Co.	548 Rockefeller Bldg.,		
	Cleveland .....	Stillwater .....	Tippecanoe
Stinard, Wm.....	R. D. 6, Cadiz.....	Bigger .....	
Unity Coal Co.....	405 Nat'l. Exchange Bank		
	Bldg., Steubenville.....	Copeton .....	Jewett
Webb, Samuel.....	New Athens.....		New Athens
Webster, Jos.....	Jewett .....		Jewett

## HOCKING COUNTY

A. M. Coal Co.....	Carbon Hill.....		
Adamson, Merz & Coak-			
ley Coal Co.....	21 Watkins St., Nelson-		
	ville .....	No. 208 .....	Nelsonville
B. R. Coal & Mining Co..	794 Chestnut St., Nelson-		
	ville .....	B. & R.....	Carbon Hill
Baileys, James.....	287 Adams St., Nelson-		
	ville .....	Baileys .....	Nelsonville
Beech Hill Coal Co.....	New Straitsville.....		
Big Four Mining Co.....	Carbon Hill.....		Carbon Hill ...
Bowers Coal Co.....	Nelsonville .....	Bowers .....	Nelsonville
Boyle, John.....	New Straitsville.....	Copperhead	New Straitsville
Breeze Coal Co.....	New Straitsville.....		
Briggs Coal Co.....	36 Fayette St., Nelson-		
	ville .....	Briggs .....	Nelsonville
Brooker Coal Co.....	Murray City.....	North Hocking	
		No. 3 .....	Murray City
Brush Fork Coal Co.....	Nelsonville .....		Nelsonville



## HOCKING COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Buckeye Coal & Ry. Co...	44 E. Broad St., Co- lumbus .....	{..... No. 2.....	Murray City Jobs
Cambria-Hocking Coal Co.	909 Huntington Bank Bldg., Columbus.....	.....	Nelsonville
Canter Coal Co.....	Jobs .....	Consol No. 1....	Jobs
Carbon Coal Co.....	44 E. Broad St., Co- lumbus .....	Prosperity .....	Carbon Hill
Carbon Hill Mining Co...	Carbon Hill.....	.....	Carbon Hill
Coakley, Alonza.....	Nelsonville .....	.....	Nelsonville
Coakley Bros.....	Nelsonville .....	.....	Nelsonville
Coe Run Coal Co.....	Carbon Hill.....	.....	Carbon Hill
Cook Coal Co.....	436 Poplar St., Nelson- ville .....	.....	Nelsonville
Craig Coal Co.....	Nelsonville .....	No. 1 .....	Murray City
Dew Coal Co., C. G.....	70½ W. Washington St., Nelsonville .....	Brooks Hollow.	Nelsonville
Douglas, Clell.....	Nelsonville .....	.....	.....
Douglas Coal Co., G. W.	Jobs .....	Douglas .....	Jobs
Essex Coal Co.....	1101 Hayden Bldg., Co- lumbus .....	Esco No. 1....	New Straitsville
Fisk, E. W.....	Box 384, Nelsonville....	Doan Run .....	Nelsonville
Gem Coal Co.....	410 W. State St., Co- lumbus .....	Gem .....	Greendale
Globe Coal Co.....	Murray City.....	S. C. No. 513...	Consul
Greenbrair Coal Co.....	Nelsonville .....	Greenbiar .....	Nelsonville
Halestock Coal Co.....	1101 Hayden Bldg., Co- lumbus .....	Esco No. 3....	New Straitsville
Hazelton Coal Co.....	New Straitsville.....	Gem .....	New Straitsville
Hellyer, Ira.....	R. D. 4, Nelsonville.....	.....	.....
Hocking Valley Products Co. ....	175 S. High St., Co- lumbus .....	Hammond .....	Greendale
Joyce Coal Co.....	Carbon Hill.....	Joyce .....	Carbon Hill
June Coal Co.....	601 Commerce Bldg., Co- lumbus .....	Russell Run ...	Carbon Hill
Keeton Coal Co.....	Nelsonville .....	.....	.....
Kramer Bros. Coal Co...	New Straitsville.....	Butterfly .....	New Straitsville
Lehman, Bert.....	R. D. 4, Logan.....	.....	.....
Locke Bros. Coal Co.....	Longstreth .....	.....	.....
Logan Coal Co.....	Logan .....	.....	.....
Lost Run Coal Co.....	1101 Hayden Bldg., Co- lumbus .....	Esco No. 2....	New Straitsville
Love Brothers Coal Co...	39 Short St., Nelsonville.	3 X .....	Nelsonville
M. & N. Coal Co.....	Murray City.....	.....	Murray City
Martin Coal Co.....	Nelsonville .....	.....	.....
May Coal Co.....	1101 Hayden Bldg., Co- lumbus .....	Russel Run } No. 3.....	Carbon Hill
		Shannon Hol low .....	
Monday Coal Co.....	Carbon Hill.....	.....	Carbon Hill

## HOCKING COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Monks, Chas.....	Nelsonville .....		Nelsonville
Murday Coal Co.....	Carbon Hill.....	Wollypog .....	Carbon Hill
Murphy-Hocking Coal Co.	Logan .....		
National Fire Proofing Co.	Fulton Bldg., Pittsburgh, Pa. ....	Black Diamond.	Haydenville
Newell Coal Co.....	Nelsonville .....		
New York Coal Co.....	8 E. Broad St., Co- lumbus .....	No. 30.....	Orbiston
		No. 37.....	Nelsonville
		No. 39.....	Monday
North Hocking Coal Co...	Nelsonville .....	No. 2.....	Nelsonville
Nutter & Griffin.....	R. D. 4, Nelsonville.....		Nelsonville
Nutter & Parks.....	Logan .....		
Ohio Blue Ridge Coal Co.	1204 Brunson Bldg., Co- lumbus .....	No. 19.....	Murray City
Patton Coal Co.....	Nelsonville .....	Patton .....	
Pittsburgh Coal Co.....	50 E. Broad St., Co- lumbus .....	No. 5.....	Murray City
		No. 7.....	
		No. 7½.....	
Powell Creek Coal Co.....	Nelsonville .....	Powell Creek...	New Pittsburgh
Riddle Coal Co., F. J.....	Murray City.....		Murray City
Riley Coal Co.....	Nelsonville .....		Nelsonville
Rome Coal Co.....	Carbon Hill.....	Helm Clay.....	Carbon Hill
Sanborn Coal Co.....	Murray City.....	No. 1.....	Jobs
		No. 2.....	
Sand Run Coal Co.....	Nelsonville .....	Top Hill.....	
Sheren, B. F.....	Nelsonville .....	Blue Bell.....	Carbon Hill
Shultz & Green.....	R. D. 4, Nelsonville.....		Carbon Hill
Skiver & Sons.....	Nelsonville .....	Skivers .....	Nelsonville
Snake Hollow Coal Co....	79½ W. Washington St., Nelsonville .....	No. 207.....	Nelsonville
Snow Fork Coal Co.....	Murray City.....	No. 1.....	Murray City
		No. 2.....	
Southern Ohio Coal Co...	Brunson Bldg., Columbus.	Starr .....	New Plymouth
Sowers Coal Co.....	1035 Poplar St., Nelson- ville .....	Azbell .....	Jobs
Spencer Hollow Coal Co..	Nelsonville .....		
Stalter Coal Co., R.....	1104 Hayden Bldg., Co- lumbus .....	No. 1.....	Carbon Hill
		No. 2.....	
Sycamore Coal Co.....	Murray City.....		Murray City
Taylor & Murday.....	Cols. Sav. & Trust Bldg., Columbus .....	Coalgate .....	New Straitsville
Vorhes & Green.....	176 Washington St., Nel- sonville .....		Nelsonville
Ward Fuel Co.....	Murray City.....	Swank-Bryan ..	
Wel-Eber Coal Co.....	Carpenter Block, Nelson- ville .....		Nelsonville
White Oak Coal Co.....	New Straitsville.....	Essex No. 4....	New Straitsville

## HOCKING COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Wilson, Fred.....	Nelsonville .....	No. 2 Drescher.	
		No. 1 Drescher.	
Wolf & Co., Ed.....	Nelsonville .....		Nelsonville
Wyskiver Coal Co.....	Haydenville .....		Haydenville

## HOLMES COUNTY

Ballagh, Wm.....	Holmesville .....		Holmesville
Bird, M. G.....	R. D. 6, Millersburg.....		Millersburg
Brooks, Wm.....	R. D. 6, Millersburg.....		Millersburg
Brown, Fred J.....	Berlin .....	Brown .....	Berlin
Buchy, G. W.....	Berlin .....		Berlin
Carter, Isaac.....	Millersburg .....	Carson .....	Millersburg
Croft Coal Co.....	Killbuck .....		Killbuck
Donald Coal Co.....	Millersburg .....	Black Diamond.	Millersburg
Dowalter, Jno. W.....	R. D. 1, Dundee.....	Schumacker ....	Dundee
Felton, Calvin C.....	R. D. 6, Millersburg.....	Cullen .....	Millersburg
Geib, Chas.....	Millersburg .....	Cannel .....	Millersburg
Hitchcock, E. B.....	Berlin .....		Berlin
Hostetter, Alf.....	Dundee .....		Dundee
Johnson, Carlos.....	Mt. Vernon.....	Cannel .....	Killbuck
Lazear, Geo.....	508 W. High St., Mt. Vernon .....		Killbuck
Mackey, A. R.....	Millersburg .....		Millersburg
Ralston, Albert.....	Millersburg .....	Quillen .....	Millersburg
Smith, C. R.....	Millersburg .....	Stone Hill.....	Millersburg
United Refractories Co....	8 E. Long St., Columbus.	Redett No. 2....	Fredericksburg

## JACKSON COUNTY

American Coal Mining Co.	703 Linden Ave., Dayton.		Kitchen
Armstrong Coal Co.....	Jackson .....	Lucy .....	} Jackson
		Armstrong ....	
Bachrach Coal Co.....	Wellston .....	Bachrach .....	Wellston
Ball, Robt. H.....	322 Huffman Ave., Day- ton .....		
Banner Coal Co.....	Jackson .....	Mose Davis.....	Oak Hill
Beaver Tile & Brick Co...	Beaver .....		Beaver
Behen, O. A.....	Jackson .....		
Bloomfield Mining Co....	Jackson .....		Jackson
Bolen, Ezekiel.....	R. D. 4, Jackson.....		Jackson
Booth, Chas. W.....	113 Main St., Jackson....	Booth .....	Jackson
Bowman Coal & Mining Co. ....	Oak Hill .....		
Branigan, John.....	R. D. 1, Coalton.....	Lauderbach ....	Coalton
Browne Coal Co.....	Wellston .....	No. 2.....	
Brunton Bros.....	R. D. 1, Coalton.....	Brunton .....	Coalton
Bryan Bros.....	Jackson .....		
Bundy Run Coal Co.....	Wellston .....	No. 1.....	Wellston
Chapman Coal Co.....	204 Main St., Jackson....	Grace .....	} Jackson
		Chapman .....	

## JACKSON COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Clutts Coal Co., T. D.....	Wellston .....	Shady Grove No. 1..... Shady Grove No. 2.....	Berlin Cross Roads
Coalton Fuel Co.....	1115 Broadway, Coalton..	Buckeye .....	
Cochran, A. J.....	R. D. 3, Jackson.....	Cochran No. 2..	Jackson
Davis, David.....	R. R. 6, Jackson.....	Davis .....	
Davis, Mose .....	Oak Hill .....		
Davis Coal Co., W. E....	Coalton .....		
Davis Fire Brick Co.....	Oak Hill.....		Oak Hill
Davis & Son, Jno.....	Oak Hill.....	McKelterick ....	Oak Hill
Darling, W. F.....	Coalton .....	Toadlope .....	Coalton
Dee Clay Products Co, Wm. E.....	Oak Hill.....		Oak Hill
De Witte-Rapp Coal Co...	709 Mutual Home Bldg., Dayton .....		
Diamond Brick Co.....	Oak Hill .....		Oak Hill
Diamond Coal Co.....	Jackson .....	Springfield .....	Jackson
Domestic Coal Co.....	Wellston .....		Wellston
East End Coal Co.....	Wellston .....		Wellston
Eicher, Baston.....	Oak Hill.....		Oak Hill
Elk Fork Coal Co.....	E. Broadway, Wellston...	No. 2.....	Wellston
Elkhorn Mining Co.....	322 Huffman Ave., Day- ton .....	Dayton No. 1...	Jackson
Evans, Alb.....	R. D. 1, Oak Hill.....		
Evans, Dan.....	Jackson .....		
Evans, Tom D.....	Oak Hill .....		Oak Hill
Evans, T. J.....	Coalton .....	Victor .....	Coalton
Evans-Davis Coal Co....	Oak Hill.....		
Evans-Ridgway .....	205 Main St., Jackson...		
Exline Coal Co., J.....	R. D. 4, Jackson.....	Crescent .....	Jackson
Faulkner, Jno. M.....	R. D. 1, Jackson.....		
Foose, Marion.....	Wellston .....		
Garfield Mining Co.....	Coalton .....	Sell .....	Coalton
Glen Roy Coal Co.....	Pearl St., Jackson.....		Coalton
Globe Iron Co.....	Main St., Jackson.....	No. 4.....	Jackson
Goodrich, A. V.....	Wellston .....		
Gulf Run Coal Co.....	Jackson .....		
Handley, H. Homer.....	606 Penn Ave., Wellstone.		
Harper Coal Co.....	Coalton .....	Harper .....	Coalton
Harris, Allison.....	Coalton .....		
Hayth & Boswell.....	R. D. 4, Jackson.....		Jackson
Hotchkiss, W. M.....	Wellston .....		Wellston
Howe, Al.....	Jackson .....	Howe .....	Jackson
Hunley Bros.....	Wellston .....		
Iron Valley Coal Co.....	Canaanville .....	No. 1..... No. 2..... Brown .....	Wellston
Jackson Coal Co.....	Jackson .....	Norman .....	
Jackson Coal Co.....	Oak Hill.....	Thomas & Davis.	

## JACKSON COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Jackson Colliery Co.....	115 Broadway St., Jackson .....	Sun No. 1.....	} Jackson
		Sun No. 2.....	
Jackson Hill Coal Co.....	Jackson .....	Jackson Hill....	Jackson
Jackson Iron & Steel Co..	Jackson .....	Jisco .....	Jackson
Jackson Red-Star Mining Co. ....	McArthur .....		McArthur
Jasper Coal Co.....	Ohio Ave., Wellston....		Wellston
Johnson, Chalmer.....	Jackson .....		Jackson
Johnson & Goddard Coal Co. ....	Jackson .....		
Jones, Ed. J.....	Oak Hill.....	Jefferson .....	Oak Hill
Jones, D. W.....	P. O. Box 154, Oak Hill. ....		
Jones, H. S.....	Wellston .....		Wellston
Jones, Thos. S.....	R. D. 1, Jackson.....		Jackson
Kesinger Coal Co.....	Jackson .....	Kesinger .....	
Kitchen Coal Co.....	Oak Hill.....	Evans-Davis ....	Jackson
McCormick, C. O.....	R. D. 4, Jackson.....		Jackson
McKinniss, Wm.....	Jackson .....		Jackson
McKitterick, W.....	Jackson .....	Compass Hill....	Jackson
Mapes, Arthur.....	Jackson .....		Jackson
Margarete Coal Co.....	Dayton .....	Margarete .....	Wellston
Maynard Coal Co.....	20 E. Broad St., Columbus .....	Wainright .....	Wellston
Milton Mining Co.....	Wellston .....	Milton No. 1... ..	Wellston
Minglewood Coal Co.....	Wellston .....	No. 3.....	} Wellston
		No. 5.....	
Mohawk Coal Co.....	Wellston .....		Wellston
Morgan-Davis Coal Co....	Oak Hill.....		Oak Hill
Montgomery & Cruse....	Jackson .....	Liberty .....	Jackson
Northern Coal Co.....	Glen Roy.....		Glen Roy
Oak Hill Fire Brick & Coal Co.....	Oak Hill.....		Oak Hill
Oliver, James.....	Coalton .....	Eclipse .....	Coalton
Paine Coal Co.....	R. D. 3, Jackson.....	Paine .....	Jackson
Patterson & Saltsman....	Wellston .....		
Peyatt, Wm.....	Coalton .....		Coalton
Pittenger, J. A.....	R. D. 2, Wellston.....		Wellston
Poe, Alfred.....	R. D. 4, Jackson.....		Jackson
Pugh, Fred.....	Glen Roy.....		Glen Roy
Pyro Clay Products Co....	Oak Hill.....		Oak Hill
Rawhide Coal Co.....	Wellston .....	Rawhide .....	
Rhodes, E. A.....	Coalton .....		Coalton
Rice, Jess.....	Wellston .....		Wellston
Richards, Everett E.....	R. D. 1, Coalton.....		Coalton
Rich Run Coal Co.....	Wellston .....	Rich Run.....	
Ridenour & Shively Coal Co. ....	Broadway St., Jackson... ..		
Rockwell & Dull.....	Glen Roy.....	Northern .....	Glen Roy
Rowe, Wm.....	Coalton .....		Coalton

## JACKSON COUNTY—Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Rowe & Stanton Coal Co.	Coalton .....	.....	
Roy Coal Co.	R. D. 2, Wellston.....	.....	Wellston
Scott, Alfred M.	Coalton .....	.....	Coalton
Scott, Fred.	Coalton .....	.....	
Scott & Harper.	Coalton .....	.....	
Sherley Mining Co.	177 E. South St., Jackson	.....	
Shively, F. J.	66 Chestnut St., Jackson.	Shively .....	Jackson
Sniff, F. H.	Dayton .....	Sniff .....	
Standard Colliery Co.	Jackson .....	.....	
Sternberger-Jones Mining Co.	Jackson .....	.....	Jackson
Superior Colliery Co.	Hammond Bldg., Detroit, Mich. ....	No. 3. .... No. 9. .... No. 10. .... No. 11. .... No. 12. .... No. 14. .... No. 15. .... No. 16. .... No. 17. .... No. 20. ....	Wellston
Tug Run Coal Co.	Jackson .....	.....	
Twin-Ada Coal Co.	Coalton .....	Twin Ada.....	
Victor Colliery Co.	606 State Life Bldg., Indianapolis, Ind.....	.....	
Wellston Hill Coal Co.	Wellston .....	Brown .....	
Wellston Rich Coal Co.	Wellston .....	.....	
Wilson, Jas.	R. D. 4, Jackson.....	.....	
Wilson Coal Co., C. C.	Wellston .....	.....	
Williams, D. W.	Berlin Cross Roads.....	.....	
Wills Coal Co.	Coalton .....	.....	
Woods & Foster.	Jackson .....	Woods .....	
Woodrow Coal & Mining Co.	Hobt Bldg., Wellston....	.....	Wellston

## JEFFERSON COUNTY

Adena Coal Co.	Adena .....	.....	Adena
American Sewer Pipe Co.	15 Broad St., Akron.....	Great Western.) Forest City....	Toronto
Apex Coal Co.	629 Rockefeller Bldg., Cleveland .....	Apex No. 2....	
Ashman, Chas.	Ramsey .....	Long Run.....	Ramsey
Bailie, Samuel W.	R. D. 1, Mingo Junction..	.....	
Banfield Coal Co.	Irondale .....	Banfield oal....	
Banisna Coal Co.	1108 Schmulbach Bldg., Wheeling, W. Va.....	.....	Weems

## JEFFERSON COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Beacon Coal Co.....	138 N. 7th St., Steubenville .....		Unionport
Beech Flats Coal Co.....	139 Vermillion St., Danville, Ill.....	Beech Flats.....	Rush Run
Bellaire Mining Co.....	12th St., Bellaire.....	Bellaire .....	
Beluan Coal Co.....	110 Schmulbach Bldg., Wheeling, W. Va.....	Beluan .....	Weems
Bergholz Coal Mining Co.	509 Commercial Bank Bldg., Cleveland .....	X. L.....	Bergholz
Bickerstaff, Henry.....	R. D. 1, Mingo Junction.	Robert Hill.....	Mingo Junction
Brettell Bros.....	Mingo Junction.....	Brettell .....	Mingo Junction
Brilliant Coal Mining Co..	1001 Rockefeller Bldg., Cleveland .....	Bunny .....	Brilliant
Brindley, Samuel.....	R. D. 2, Rayland.....	Brindley .....	Rayland
Carman, Samuel.....	R. D. 1, Bloomingdale....		Bloomingdale
Clairmont Coal Co.....	Box 82, Steubenville....	Clairmont No. 1.	Steubenville
Consolidated Fuel Co.....	1203 Chamber of Commerce Bldg., Pittsburgh, Pa.....	Kelley .....	Rayland
Cox, W. S.....	Smithfield .....	Mansfield .....	Steubenville
Cox & Sons, W. D.....	Brilliant .....	Peacock .....	Brilliant
Crawford Hill Coal Co....	1606 Union Nat'l. Bank Bldg., Cleveland.....	Russell .....	Tiltonsville
Crisman & Son, F.....	R. D. 1, Mingo Junction..		Mingo Junction
Cross Creek Coal Co.....	Steubenville .....	Coal Hill.....	Steubenville
Dunn, Neal J.....	Steubenville .....	Hilltop .....	Steubenville
East Ohio Sewer Pipe Co.	Irondale .....	Creel No. 1.... }	
		Big Vein No. 2 }	Irondale
Edmunds, Ed.....	Adena .....		Adena
Ervin, J. J.....	Mingo Junction.....		Mingo Junction
Eureka Coal Co.....	Mt. Pleasant.....		
Eureka Coal Mining Co...	Bridgeville, Pa.....		
Fernwood Coal Co.....	1352 Frick Annex, Pittsburgh, Pa.....		
Foster, L. E.....	Smithfield .....	Galbraith .....	Smithfield
Gallagher, Chas.....	Adena .....	Ruth .....	Adena
Glens Run Coal Co.....	1414 Rockefeller Bldg., Cleveland .....	Rush Run No. 3 }	
		Rush Run No. 4 }	
		Edgar No. 2.... }	
		Edgar No. 3.... }	Dillonvale
Great Lakes Coal Mining Co. ....	50 E. Broad St., Columbus .....	Ramsey No. 2...	Ramsey
Great Northern Sewer Pipe Co.....	Empire .....		Empire
Great Western Coal & Dock Co.....	Bergholz .....		Bergholz
Grover Coal & Mining Co.	Tiltonsville .....	Murie .....	Tiltonsville
Henry Bros.....	R. D. 2, Steubenville....		Steubenville

## JEFFERSON COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Highland City Coal Co....	Martins Ferry.....	Genree .....	Martins Ferry
Hillsinger, L. H.....	Toronto .....	.....	.....
Hobson Coal Co.....	Richmond .....	.....	Richmond
Hollow Rock Mining & Transportation Co.....	German Bank Bldg., Wheeling, W. Va.....	.....	Irondale
Hudson Coal & Coke Co., The S. M.....	506 National Exchange Bldg., Steubenville.....	.....	.....
Jean Coal Mining Co.....	1001 Rockefeller Bldg., Cleveland .....	Jean .....	Brilliant
Jefferson Coal Co.....	401 Citizens Bldg., Cleve- land .....	No. 1..... No. 2..... No. 3..... No. 4.....	Piney Fork Harperville
Jones, A. C.....	Yorkville .....	.....	Yorkville
Kaul Clay Mfg. Co.....	Toronto .....	.....	Toronto
Large, J. W.....	R. D. 1, Rayland.....	.....	Rayland
Lash, Chas. F.....	Mingo Junction.....	Robt. Hill No. 2.	Mingo Junction
La Belle Iron Works.....	Third & Bates St., Steu- benville .....	.....	Steubenville
Long Run Coal Co.....	922 Clarendon Ave., S. W., Canton.....	Gem .....	Dunglan
McLain Fire Brick Co....	508 Fulton Bldg., Pitts- burgh, Pa.....	Strip Vein.....	Irondale
Mase & Co.....	Smithfield .....	Sutherland .....	Smithfield
Minor & Co.....	302 Berger Bldg., Pitts- burgh, Pa.....	Minor .....	.....
Minor Fire Brick Co.....	Empire .....	.....	Empire
Moody, Samuel.....	Mingo Junction.....	.....	Mingo Junction
Morris-Poston Coal Co....	906 Citizens Bldg., Cleve- land .....	Dun Glen .....	Dun Glen
Muron, Jos. F.....	Dillonvale .....	.....	Dillonvale
Nicholson, P. R.....	Dillonvale .....	.....	Dillonvale
Nicholson, Robt. W.....	Hammondsville .....	.....	.....
Ohio & Penna. Coal Co...	1210 Williamson Bldg., Cleveland .....	West Pgh. No. 1 West Pgh. No. 2	Bergholz Amsterdam
Ohio River Sewer Pipe Co.	Empire .....	Ohio River .....	Empire
Oliver & Co.....	Dillonvale .....	Old Merkle .....	Dillonvale
Orvick, J. O.....	Richmond .....	McMillan .....	Richmond
Peerless Clay Co.....	Port Homer.....	Peerless .....	.....
Piney Fork Coal Co.....	8 E. Broad St., Columbus.	Electro .....	Weems
Pluto Coal Co., The.....	1203 Chamber of Com- merce Bldg., Pitts- burgh, Pa.....	.....	Rayland
Raber, C. E.....	Box 23, Smithfield.....	Garrison .....	.....



## JEFFERSON COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
River Ridge Coal Co.....	307 Rockefeller Bldg., Cleveland .....	Diamond .....	Wellsville
Roby Coal Co.....	521 Cuyahoga Bldg., Cleveland .....	Somers No. 2...	Adena
Saline Coal Co.....	Doherty Bldg., Steuben- ville .....	.....	Hammondsville
Scovern, Stanley.....	R. D. 2, Steubenville.....	Ekey .....	.....
Sloane Coal Co., The.....	Toronto .....	.....	.....
Sndyer, J. F.....	Mt. Pleasant.....	Snyder .....	Mt. Pleasant
Steubenville Coal & Min- ing Co.....	121 Liberty St., Steuben- ville .....	High Shaft ....	Steubenville
Strabley, Jas.....	Bergholz .....	.....	Bergholz
Strickler, Jacob.....	Smithfield .....	.....	Smithfield
Sugar Hill Coal Co.....	1249 Penna. Ave., Steu- benville .....	Sugar Hill ....	Steubenville
Superior Coal Co.....	417 National Exchange Bank Bldg., Wheeling, W. Va. ....	.....	Bloomington
Thomas, E. R.....	Wilson Ave., Steubenville.	Robt. Hill No. 3. ....	.....
Tiltonville Coal Mining Co., Tiltonville.....	Tiltonville .....	.....	Tiltonville
Toronto Fire Clay Co.....	Toronto .....	Nicholson .... } Little Grant .. }	Toronto
Toronto Fuel Co.....	Toronto .....	.....	.....
Union Clay Mfg. Co.....	Empire .....	Union .....	.....
United States Coal Co.....	1206 Citizens Bldg., Cleveland .....	Plum Run ....	Rhodesdale
Virgin Coal Co.....	Box 66, Parlett.....	Crow Hollow ...	Bradley
Ward, Thos.....	Wilson Ave., Steuben- ville .....	.....	Parlett
Wayne Coal Co.....	Benedum - Trees Bldg., Pittsburgh, Pa.....	No. 4 .....	Hopedale
		No. 1 } No. 2 } No. 3 }	Parlett
Wemple, A. S.....	Empire .....	.....	.....
Witch Hazel Coal Co.....	710 Dollar Bank Bldg., Youngstown .....	Florence No. 3..	Smithfield
Woodward Coal Co.....	Smithfield .....	Hunter .....	.....
Wolf Run Coal Co.....	1606 Union Nat'l. Bank Bldg., Cleveland.....	Elizabeth .....	Wolf Run
Yellow Creek Coal & Clay Co. ....	1780 Clark Ave., Wells- ville .....	Buckeye .....	Wellsville
Youghiogheny & Ohio Coal Co.....	1240 Leader-News Bldg., Cleveland .....	Amsterdam No.1	Amsterdam

## LAWRENCE COUNTY

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Alias, David.....	R. D. 2, Ironton.....		
Bear Run Mining Co.....	Jackson .....	Bear Run .....	Eifort
Beech Grove Coal Co.....	210 Centre St., Ironton...		Beech Hollow Grove
Brammer, J. K.....	R. D. 1, Ironton.....	Forest Dale .....	Ironton
Brown, Ambrose.....	R. D. 1, Hanging Rock...	Keystone .....	Hanging Rock
C. D. & K. Coal Co.....	Box 88, Van Wert.....	Sheridan .....	Ironton
Cambria Clay Products Co.	Blackfork .....	Clarion No. 4. }	Blackfork
		Cambria .....	
Carey, Philip.....	Coal Grove.....	Lane No. 10.....	Coal Grove
Chatfield, C. W.....	South Point.....	Chatfield .....	South Point
Compliment, W.....	R. D. 1, Ironton.....	Compliment .....	Ironton
Edwards, M.....	R. D. 1, Ironton.....		Ironton
Gannon, J. C.....	1411 S. Ninth St., Ironton.	Richey Hollow ..	Ironton
Geil, Andrew.....	R. D. 1, Ironton.....	Coal Grove .....	
Ginn Coal Co.....	Third & Center Sts., Ironton .....	Red Devil .....	Ironton
Griffith, S. D.....	R. D. 2, Pedro.....		Pedro
Guston Coal Co.....	Ironton .....		
Halley Coal Co.....	Pedro .....	No. 2 .....	Pedro
		No. 3 .....	
Hanging Rock Iron Co....	Hanging Rock.....	Newcastle .....	Hanging Rock
Hanshaw, Chas.....	North Kenova.....	Sheridan .....	North Kenova
Harbison-Walker Refrac- tories Co.....	1800 Farmers Bank Bldg., Pittsburgh, Pa.....	York .....	Firebrick
Harmon, A.....	R. D. 1, Ironton.....		
Holtzapfel, Ed.....	Ironton .....		
Jackson Low Ash Coal Co.	515 Mutual Home Bldg., Dayton .....	Buckhorn .....	Jep
Johnson & Taylor.....	South Point.....		South Point
Jones, Ed. J.....	Oak Hill.....	Oive .....	Jep
Kelley, J. C.....	Culbertson .....	Kelley .....	Culbertson
Kelley, Joe.....	Pedro .....	Stonewall .....	Pedro
Kinotter, Charles.....	R. D. 2, Ironton.....		Ironton
Lowry, J. W.....	R. D. 2, Ironton.....		Ironton
Marting Iron & Steel Co..	Ironton .....	Reidel .....	
Maxey, W. R.....	Culbertson .....	Halley .....	Culbertson
Ohio Coal Co.....	622 Park Ave., Ironton...		Ironton
Poirier, H. B.....	South Point.....		
Portsmouth Refractories...	Gallia Ave., Portsmouth..	No. 3 .....	Firebrick
		No. 4 .....	
Reidel, Jno.....	R. D. 1, Ironton.....		Coal Grove
Rutledge & Sons, W. H...	Fifth & Lorain Sts., Iron- ton .....	Rutledge .....	Ironton
Saler, Fred.....	R. D. 1, Ironton.....		
Scherer & Hughes.....	2027 S. Third St., Iron- ton .....	No. 2 .....	Ironton
Shafer, C. W.....	Coal Grove.....		Coal Grove
Sheridan Mining Co.....	Ironton .....		

## LAWRENCE COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Shields, Margaret E.....	R. D. 1, Hanging Rock...		
Sites, Wm. W.....	R. D. 1, Ironton.....		R. D. 1, Ironton
Sloan, Lafe .....	Coal Grove.....		Coal Grove
Stewart & Shubert Coal Co. ....	Ironton .....	Shubert .....	
Western Rivers Co.....	Point Pleasant, W. Va..		
Woods, Geo.....	R. D. 2, Ironton.....	Woods .....	
York, L. D.....	925 Offnere St., Ports- mouth .....		Firebrick

## LICKING COUNTY

National Road Coal Co., The .....	Newark .....
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## MAHONING COUNTY

American Fire Clay & Products Co.....	910 American Trust Bldg., Cleveland .....	Fisk .....	Calla
Black Coal Co., The.....	West Austintown.....		
Black Diamond Coal Co...	Diamond .....	Black Diamond..	
Callahan, Homer.....	R. D. 6, Salem.....	Greenmyer .....	Salem
Coy, Geo.....	R. D. 1, Washingtonville..	Coy .....	Washingtonville
Coy, L. E. & W. P.....	Greenford .....	Shady Brook....	Greenford
Dougherty, Lawrence.....	R. D. 4, Salem.....		Salem
Egypt Coal Co.....	49 Washington St., Salem.	Howell .....	Salem
Englert & Son, C. B.....	117 Fair St., Salem.....		
Greenford Coal Works...	Washingtonville .....	Coy .....	Washingtonville
Greenford Tile & Clay...	Greenford .....		Greenford
Hahn, W. A.....	North Lima.....	Sunshine .....	North Lima
Hamilton Coal Co.....	1003 Wick Ave., Youngs- town .....	North Lima....	Youngstown
Heck, S. J.....	Columbiana .....		Columbiana
Holroyd, Samuel.....	Salem .....	Whitmore .....	
Kelley, Wm. S.....	North Lima.....	Peacock .....	North Lima
Leuxill & Hartzell.....	Washingtonville .....		Washingtonville
Moyer Bros.....	R. D. 4, Youngstown.....	Pauline .....	Youngstown
Oak Grove Coal Mining Co. ....	West Austintown.....		
Painter, Geo.....	Poland .....	Brown .....	Poland
Paulin, Jos.....	Poland .....	Paulin .....	Poland
Porter Bros.....	R. D. 2, Poland.....		Poland
Sebring Coal Co.....	Sebring .....		
Shepard, Jesse.....	R. D. 4, Salem.....	Rock Hollow	Salem
Shepherd & Whinnery.....	R. D. 6, Salem.....		Salem
Stanley, H. S.....	Garfield .....		Garfield
West Austintown Block Coal Co.....	West Austintown.....		
Williams, Roy.....	North Lima.....		
Zimmerman, S. E.....	R. D. 4, Salem.....	Sears .....	Salem

## MEDINA COUNTY

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Gertenschlager & Son, V...	139 Pine St., Wadsworth..	Pleasant Valley..	Wadsworth
Hambleton Bros.....	Wadsworth .....	Hambleton .....	Wadsworth
Hutchinson Coal Co.....	R. D. 2, Wadsworth.....	Star .....	Wadsworth

## MEIGS COUNTY

Archer, Stephen.....	R. D. 3, Pomeroy.....	Thomas Fork....	R. D. 3, Pomeroy
Athens & Pomeroy Coal & Land Co., The.....	Athens .....		
Barton Coal Co.....	Rutland .....	May Run.....	Rutland
Blower, J. W.....	Columbus .....	Silver Run.....	
Burford, W. T.....	R. D. 1, Pomeroy.....		R. D. 1, Pomeroy
Custis, J. A.....	R. D. 4, Pomeroy.....	Carter .....	R. D. 4, Pomeroy
Davis Coal Co., T. H....	Middleport .....		Pomeroy
Feris, O. K.....	Pomeroy .....		Pomeroy
Fisher, Theo.....	Pomeroy .....		Pomeroy
Folmer Bros.....	Star Route, Pomeroy....	Coal Ridge.....	Pomeroy
Fich, Philip.....	Pomeroy .....		
Frick, Philip.....	P. O. Box 425, Pomeroy..		Pomeroy
Gibbs & Son.....	Middleport .....	King .....	Hobson
Gilkey Coal Co.....	R. D. 1, Middleport.....	Gilkey .....	Middleport
Grogan, Mrs. J. W.....	Middleport .....		Middleport
Hanning & Field Scott, H. H.....	Athens .....		Athens
Heim & Sons.....	Pomeroy .....		Pomeroy
Hennessy & Durst.....	Pomeroy .....	Logan .....	Pomeroy
Hobart, M. C.....	Mill .....	Indian .....	Middleport
Hoover, H. M.....	Middleport .....	Ohio River No. 2..	Middleport
Johnston, Tom.....	R. D. 1, Middleport.....	Johnson .....	Middleport
Kasper & Werry.....	Pomeroy .....		Pomeroy
Kauff, Wm. & George....	Middleport .....	Diamond .....	Middleport
King, T. V.....	R. D. 1, Middleport.....	King Wagon Mine .....	Middleport
Lambert, Isaac.....	R. D. 1, Middleport.....		Middleport
Lima Coal Co.....	Lima .....		
Llama, J. M.....	Nelsonville .....	No. 5.....	Middleport
Maynard Coal Co.....	Columbus .....	Maynard No. 1}	
		Maynard No. 2}	Rutland
		Maynard No. 4}	
		Maynard No. 3..	Middleport
Minehart, J. J.....	Pomeroy .....	Ohio River.....	Pomeroy
Ohio River Coal Co.....	1008 Hayden Bldg.....	Meinhart or Monkey Run..	Pomeroy
		Thorn Hill....	
Ohio River Fuel Co.....	Pomeroy .....	J. J. Minehart...	Pomeroy
Peacock Coal Co.....	Pomeroy .....	Rolling Mill....	
		Charter Oak....	
		Forest Run....	
		Dark Hollow...	Pomeroy
		Logan .....	
		Scott .....	

## MEIGS COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Peoples, L. D.....	Pomeroy .....		Pomeroy
Pittsburgh Coal Co.....	50 E. Broad St., Co- lumbus .....	Pomeroy No. 20.	Minersville
Pomeroy Colliery Co.....	Coalton .....	No. 1.....	Minersville
Pomeroy Mining Co.....	Middleport .....	Dabney .....	} Middleport
		White .....	
Powell, R. E.....	Middleport .....		Middleport
Price, C. A.....	Rutland .....		Rutland
Priode, Wm.....	Cheshire .....		Cheshire
Riley Bros. Coal Co.....	Middleport .....		
Roush, Dana.....	Pomeroy .....		
Russell, Clarence.....	Pomeroy .....		Pomeroy
Russell, S. M.....	Pomeroy .....		Pomeroy
Sauer, M.....	Middleport .....	Dabney .....	Middleport
Schwegman, Geo.....	Pomeroy .....		Pomeroy
Sherman Coal Co.....	Middleport .....	Gibbs .....	Middleport
Skidmore Coal Co.....	Middleport .....	Noble & Summit.	Middleport
Snowden, E. J.....	Rutland .....		Rutland
Stalter-Essex Coal Co.....	714 Columbus Savings & Trust Bldg., Columbus..	Stalter .....	Pomeroy
Stone & Shoemaker.....	Pomeroy .....	Rose Hill.....	Pomeroy
Taylor, B. M.....	Rutland .....		Rutland
Terrell & Sons, D. A.....	R. D. 1, Pomeroy.....		Rock Springs
Thomas Coal Co.....	Racine .....	Thomas Shaft..	Racine
Vulcan Coal Co.....	Box 187, Pomeroy.....	Essex No. 1.....	
Wells, W. H.....	Middleport .....	Fairview .....	
West & Matheny.....	Pomeroy .....	Stalter-Essex No. 3.....	
Woodward & Solsburg....	Middleport .....	Diamond .....	Middleport
Woodyard, Ami.....	Middleport .....		Middleport
Yankee Mining Co.....	601 Commerce Bldg., Co- lumbus .....		Pomeroy

## MONROE COUNTY

Dye & Dillon..... R. D. 1, Woodsfield..... Square ..... Antioch

## MORGAN COUNTY

Brown, R. D..... Rose Farm..... Brown ..... Rose Farm  
Hann Coal Co., G. P..... S. 7th St., Zanesville.... Hann ..... Zanesville  
New York Coal Co..... 8 E. Broad St., Columbus. No. 51..... Rose Farm  
Tropic Mining Co..... 721 Ohio Bldg., Toledo... Tropic ..... Rose Farm

## MUSKINGUM COUNTY

Alexander, S. E..... Zanesville ..... Zanesville  
Ashmore Bros. & T. Glen  
Denny ..... 646 Forest Ave., Zanes-  
ville .....  
Ballou Coal Co..... Roseville ..... Roseville

## MUSKINGUM COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Barker, Wm. L.....	Zanesville .....	Mine No. 1.....	Zanesville
Bertram Coal Mining Co..	Smithfield .....	Border .....	Zanesville
Besser, John.....	161 Shawnee Ave., Zanesville .....	Corbin .....	
Blaney, W. H.....	Cannelville .....		
Booth, Elmer.....	Poplar St., Zanesville....	Griner .....	
Brush Creek Coal Co., The.	Cannelville .....		
Burgess, W. T.....	R. D. 2, Zanesville.....		Zanesville
Burton-Miller Coal Co....	South Zanesville.....	Sun Side.....	South Zanesville
Burton-Townsend Co.....	18 8th St., Zanesville....	Monitor No. 1..	South Zanesville
Cook, Harry.....	Zanesville .....		
Crooks, C. F.....	East Fultonham .....		
Crowley & Cox.....	Main St., Roseville.....	Blue Goose.....	Cannelville
Crowley & W. J. Murphy, W. R. ....	Main St., Roseville.....	White Oak.....	Roseville
Darling Coal Co.....	Putnam Ave., Zanesville..	Bolan .....	Zanesville
Dixon, Wm. F.....	Sharon Ave., Zanesville..		Zanesville
Donehoo Coal Co.....	Main St., McConnellsville.	Eagle No. 58....	South Zanesville
Dresden Coal Co.....	Dresden .....		
Eichelbarger, W. H.....	Dresden .....		
Elk Coal Co.....	Cols. Savs. & Trust Bldg., Columbus .....	The Elk.....	Roseville
Evans, Geo. W.....	R. D. 9, Zanesville.....	Evans .....	
Fair Oak Coal Co.....	39 Brad St., Zanesville..	Fair Oak.....	Zanesville
Feagans, Ed.....	Dresden .....		
Fisher, C. W.....	R. D. 7, Box 32, Zanesville .....		
Fisher, F. H.....	Arlington Hotel, Zanesville .....		Zanesville
Ford-Shimp Coal Co.....	701 Putnam Ave., Zanesville .....	Weller No. 1...}	South Zanesville
		Weller No. 2...}	
Frakes, N. E.....	Zanesville .....		
Fundaberg & Clarkson....	Roseville .....	Fundaberg .....	Roseville
Gobel Coal Co.....	Main St., Roseville.....	Gobel .....	Roseville
Grace Coal Mining Co....	1010 Spitzer Bldg., Toledo	Grace Mine No. 12 .....	Cannelville
Green Hill Mining Co....	602 Clark St., Toledo....		R. D. 1, Philo
Hale, Jos. A.....	Zanesville .....		
Harkness, L. G.....	Fultonham .....		Fultonham
Harper, C. A.....	Zanesville .....		Zanesville
Harper, Frank.....	Zanesville .....		
Harper, Harry C.....	R. D. 9, Zanesville.....		Zanesville
Harris Brick & Coal Co..	Zanesville .....		
Harris Coal Co.....	111 E. 4th St., Cincinnati.		Zanesville
Hatfield, Dell.....	Philo .....		Philo
Hoff Bros. ....	R. D. 6, Zanesville.....		Zanesville
Hysell Run Coal Co.....	55 Lake Drive, Zanesville .....	Mine No. 1.....	Cannelville
Kenton & Greiner.....	513 Market St., Zanesville.	Elk .....	Zanesville

## MUSKINGUM COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Lemon, E. E.....	1030 Eastman St., Zanesville .....		Zanesville
Luman, T. E.....	Roseville .....		Roseville
McCoid, W. E.....	Duncan Falls.....		Duncan Falls
McCoy Bros.....	Roseville .....		Roseville
McClelland & Wilson Coal Co. ....	Crocksville .....		
McGarvey Coal Co., J. A..	16 McIntire Ave., Zanesville .....	Rose Bud.....	Cannelville
		Garritt No. 2....	Philo
Mahany, W. A.....	121 N. 9th St., Zanesville.		Zanesville
Midway Coal Co.....	Roseville .....		
Morgan, J. W.....	R. D. 9, Zanesville.....		Zanesville
Neal, Allen.....	R. D. 4, Zanesville.....	Neal .....	
Neff, S. A.....	Cannelville .....	Willow .....	Cannelville
Pan-American Coal Co....	512½ Main St., Zanesville.	Turkey Run No. 41.....	Cannelville
		Pan-American No. 11.....	
Parish, B. G.....	Roseville .....		Roseville
Paul, Frank J.....	R. D. 6, Zanesville.....	Paul .....	Zanesville
Paul, P. N.....	Zanesville .....	Paul No. 2.....	Zanesville
Paynter, Chas.....	R. D. 6, Zanesville.....	Black Diamond..	
Pemberton & Shields.....	Roseville .....	Pemberton .....	Roseville
Pletcher, Ora.....	Roseville .....		Roseville
Porter, Geo. L.....	Pleasant Valley.....	Porter .....	Hopewell
Prindle, A. W.....	Roseville .....	Midway .....	Roseville
Redman, W. O.....	R. D. 9, Zanesville.....		Zanesville
Red Oak Coal Co.....	South Zanesville.....	Red Oak.....	
Rehl Co., Wm. G.....	R. D. 3, Zanesville.....		Zanesville
Russell Bros.....	Gaysport .....	Olden Mine....	Gaysport
Station Coal Co.....	New Lexington.....		
Swingle, S. A.....	Roseville .....		
Thompson, A. F.....	Roseville .....		
Tilton, Allen.....	Roseville .....		
Tumblin, Robert.....	Zanesville .....	Hildreth .....	Zanesville
Werner, Wm. A.....	P. O. Box 284, Zanesville.	Werner .....	Zanesville
Western Penna. Coal Co..	529 Main St., Zanesville..	Buckeye .....	
Westcott, Clyde.....	White Cottage.....	George .....	Hopewell
White, H. B.....	249 Westborn Ave., Zanesville .....		Zanesville
White Oak Coal Co.....	Roseville .....		
Wigton, S. R.....	Roseville .....		Roseville
Williams, C. E.....	East Fultonham.....		E. Fultonham

## NOBLE COUNTY

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Archer, A. W.....	R. D. 1, Caldwell.....	Enoch .....	Caldwell
Beatty, J. F. & J. C.....	Mt. Ephram.....	Ideal .....	Mt. Ephram
Cambridge Collieries Co...	1050 Rockefeller Bldg., Cleveland .....	Caldwell .....	Caldwell
		Laura .....	Coal Ridge
Carter, W. M.....	Mt. Ephram.....	Black Diamond..	Mt. Ephram
Central Ohio Coal Co.....	908 Brunson Bldg., Co- lumbus .....	Coal Run.....*	
Delehay, S. H.....	Dexter City.....		
Forshey, C. W.....	R. D. 1, Harrietsville.....		Harrietsville
Forsythe Coal Co.....	951 Wheeling Ave., Cam- bridge .....	Imperial No. 1..	Belle Valley
Friday, August.....	Whigville .....	Donnelly .....	Whigville
Guiler, Homer.....	Whigville .....		Whigville
Gulick, J. L.....	Whigville .....	Gulick .....	Whigville
Hague, C. T.....	Whigville .....		Whigville
Harman, T. H.....	Olive Green.....		Olive Green
Hunter, J. M.....	Cumberland .....		Cumberland
Little Gem Coal Co.....	Cannelville .....		
McLaughlin, Geo.....	Sarahsville .....		Sarahsville
Miller, G. D.....	Harrietsville .....		Harrietsville
Moore, P. S.....	Mt. Ephram .....		
Morris, Joseph.....	Quaker City.....		Quaker City
Roberts, F. F.....	Andover .....		Andover
Rogers, J. T.....	R. D. 3, Caldwell.....		Caldwell
Rutherford, H. N.....	R. D. 1, Sarahsville.....	East Union.....	Sarahsville
Shattuck, C. E.....	Caldwell .....	Shattuck & Boyd	Caldwell
Somers, E. A.....	Quaker City.....	Wildcat .....	Quaker City
Van Dyne, Ezra.....	Whigville .....		Whigville
Vorhes, J. P.....	Sarahsville .....		
Wentworth-Kirkbude .....	Sarahsville .....	Pleasant Ridge..	

## PERRY COUNTY

Advance Coal Co.....	New Straitsville.....	Nuggett .....	New Straitsville
Allen, D. E.....	Crooksville .....		Crooksville
Ansel, Davis & Koonts Co. ....	151 Chittenden Ave., Co- lumbus .....	Davis .....	
Appleman & G. B. Carter, T. H. ....	Crooksville .....		
Arnold, Chas.....	Shawnee .....	Arnold .....	Shawnee
Azbell Coal Co.....	Shawnee .....		
Big Five Coal Co.....	New Straitsville.....	Mine No. 49....	New Straitsville
Big Six Coal Co.....	Shawnee .....		
Black Bird Mining Co....	1205 Ohio Bldg., Toledo..	Black Bird.....	
Black Diamond Coal Co...	New Straitsville.....	Black Diamond..	New Straitsville
Blair-Sharshal Coal Co...	Main St., Shawnee.....	Iron Point.....	Shawnee
Blue Jay Coal Co.....	Wellston .....	Blue Jay.....	Burr Oak
Bonifat & Driggs.....	Crooksville .....		
Brooks & Wintgens.....	Box 532, Crooksville.....		



## PERRY COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Brown & Clancy.....	New Straitsville.....		
Brown, W. J.....	South Buckeye.....		Crooksville
Buckeye Coal Co.....	Shawnee .....	Garrett .....	Shawnee
Buckeye Coal & Railway Co. ....	Outlook Bldg., Columbus.	No. 9.....	R. D. 1, Corning
		No. 90.....	
		San Toy No. 1.	
		San Toy No. 2.	
Burley, W. L.....	Crooksville .....		Crooksville
Burns, Lawrence.....	Corning .....	Burns .....	Rendville
C. & H. Coal Co.....	Shawnee .....	Caslin .....	
Cable Coal Co.....	Nelsonville .....		Shawnee
Cannon, E. R.....	Saltillo .....		Saltillo
Carney, Joe.....	R. D. 2, Somerset.....	Carney .....	Somerset
Carrington Coal Co.....	Shawnee .....		
Cascade Coal Co.....	Hemlock .....		
Caslin, D. J.....	Shawnee .....		
Cherry Alley Coal Co.....	New Straitsville.....		
Clay Bank Coal & Mining Co. ....	New Lexington.....	Clay Bank.....	Moxahala
Claycraft Mining & Brick Co. ....	907 Hartman Bldg., Columbus .....		Shawnee
Coalgate Coal Co.....	New Straitsville.....	Coalgate .....	
Corning Mining Co.....	Corning .....	Mine No. 26.....	Corning
Crooksville Mining Co....	Crooksville .....		
Danison, George.....	R. D. 3, Junction City...		
Davis Coal Co.....	New Straitsville.....	Dewey .....	Lost Run
Davis-Lewis .....	Shawnee .....	Lewis .....	
Dawson, C. L.....	Crooksville .....	Dawson .....	
Dollison, W. W.....	Roseville .....	Hill .....	
Duffy, McAloon & Nelson.	New Straitsville.....	Mine No. 51....	New Straitsville
English Hill Coal Co.....	Hemlock .....	No. 1.....	
Falk Coal Co.....	909 Huntington Bank Bldg., Columbus.....		R. D. 1, Corning
Forgrave, Austin.....	R. D. 1, Mt. Perry.....	Olive .....	Mt. Perry
Friel, T. J.....	New Straitsville.....	Friel No. 1....	New Straitsville
Goodman & Deaver.....	Crooksville .....		
Gosline & Co., W. A.....	625 Ohio Bldg., Toledo...	Bear Run.....	New Straitsville
Green, G. A.....	Somerset .....	Tom Green .....	Somerset
Green, L. B.....	Somerset .....		Somerset
H. P. & T. Co.....	1205 Ohio Bldg., Toledo..	Hazelton .....	Shawnee
Hammond, Oscar.....	R. D. 1, New Straitsville.	Hammond .....	New Straitsville
Hanna Essex Coal Co.....	New Straitsville.....	Essex .....	New Straitsville
Hemlock Coal Co.....	Hemlock .....	Kachelmacher ..	Hemlock
Hocking Block Coal Co....	1101 Hayden Bldg., Columbus .....		New Straitsville
Hughes Coal Co.....	Shawnee .....		
Humphrey & Co.....	Shawnee .....		Shawnee
Ironclay Brick Co.....	65 Ruggery Bldg., Columbus .....	Rock Run.....	Shawnee

## PERRY COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Jenkins, D. C.....	Shawnee .....		Shawnee
Jones Coal Co.....	New Straitsville.....	No. 15.....	New Straitsville
Keeton & Smith.....	Nelsonville .....	No. 2.....	
Kehota Mining Co., Inc...	506 2nd Nat'l. Bank Bldg., Pittsburgh, Pa.....	Redfield .....	
Kiener, Leo.....	Moxahala .....		
Kreitz, Henry G.....	Box 17, Shawnee.....		
Lancaster Coal & Sand Co.	Main & Broad Sts., Lan- caster .....		
Leatherlips Mining Co....	1103 Brunson Bldg., Co- lumbus .....	Raricks .....	New Lexington
Lexi Coal Co.....	New Lexington.....		New Lexington
Lost Hope Mining Co....	Shawnee .....		Shawnee
Loyal Coal Co.....	Shawnee .....		
Madden & Bro., Will.....	Mt. Perry.....	No. 2.....	Mt. Perry
Mid-Hocking Coal Co....	Corning .....		
Miller, R. W.....	Shawnee .....		
Maxwell, Thoms.....	Crooksville .....		
Miller Coal Co., Wm. J...	New Straitsville.....	Plummer Hill...	New Straitsville
Milligan, C. O.....	Crooksville .....	McLuney .....	
Monsarrat Bros.....	202 Hartman Bldg., Co- lumbus .....	No. 1, Hemlock) No. 2, Drakes..	Hemlock
Moodie, Jr., David.....	New Straitsville.....	Blinky .....	New Straitsville
Mooney & J. J. Cusick, P. F. ....	Crooksville .....		
Moore & McConnell.....	McLuney .....		
Mullen, C. A.....	Crooksville .....	No. 1.....	Crooksville
Neff Bros.....	R. D. 2, Crooksville.....		
Netzorg, L. Z.....	1205 Ohio Bldg., Toledo..		
New Lexington Sand Co..	New Lexington.....	Nugents .....	New Lexington
No. 3 Coal Co.....	Shawnee .....	Sentinel No. } 117 .....	Shawnee
		Rock Run No. }	
		113 .....	
Ohio Central Coal Co....	510 Schultz Bldg., Colum- bus .....	Ohio Central....	Moxahala
Ohio Colliers Co.....	721 Ohio Bldg., Toledo..	No. 268.....	Rendville
		No. 301.....	
		No. 302.....	Congo
Ohio Consolidated Coal Co.	Zweig Bldg., Bellairfe....	Wilbren .....	New Lexington
Ohio State Brick Stone Co.	Columbus .....	Swayer .....	Shawnee
Olmsted Coal & Mining Co	1105 Cols. Savs. & Trust Bldg., Columbus .....		
Paskell & Kinsel Co.....	New Lexington.....	White Oak.....	
Perry Coal & Sand Co....	Brunson Bldg., Columbus.		New Lexington
Peterson, Jones & Redfern.	Shawnee .....		
Pike Coal Co.....	New Lexington.....		New Lexington
Powers Coal Co., The....	New Straitsville.....		
Primrose Coal Co., The...	Lock Box 277, Shawnee..		

## PERRY COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Red Circle Coal Co., The..	Logan .....	.....	.....
Redfield Coal Co.....	Zanesville .....	No. 1.....	} R. D. 3, Roseville New Lexington
		No. 2.....	
Red Run Mining Co.....	84 E. Long St., Columbus.	.....	
Rice, J. H.....	Crooksville .....	.....	Crooksville
Roberts Coal Co.....	1183 Leonard Ave., Co- lumbus .....	Roberts .....	Moxahala
Robinson & Son, I. E.....	Mount Perry.....	High Grade No. 5.....	Mt. Perry
Roseville Coal Co.....	Roseville .....	New Crescent No. 5.....	Roseville
Royal Flush Mining Co...	New Straitsville.....	.....	Shawnee
Sagle Coal Co., R. E.....	Roseville .....	.....	.....
Saunders, A. H.....	R. D. 2, Somerset.....	.....	Somerset
Savage, George.....	McLuney .....	Savage .....	McLuney
Schroder, Chas. L.....	Corning .....	.....	Corning
Service Coal Co., The.....	310 New 1st Nat'l. Bank Bldg., Columbus.....	.....	.....
Shadyside Coal Co.....	Shawnee .....	Shadyside .....	.....
Shawnee & Drakes Coal Co. ....	Shawnee .....	.....	.....
Sines Bros. & Co.....	New Straitsville.....	.....	New Straitsville
Simmons & Son, A.....	R. D. 3, Roseville.....	Chestnut Ridge..	Roseville
Snell & Schumacher.....	Crooksville .....	.....	Crooksville
Southeastern Ohio Ry. Co.	Zanesville .....	Wigton .....	.....
Southern Perry Coal Co...	New Straitsville.....	No. 1.....	.....
Standard Hocking Coal Co.	McCormick Bldg., Chicago, Ill. ....	Rend .....	Crooksville
Stoneburner & Tysinger...	R. D. 2, Crooksville.....	.....	.....
Taylor & Neilson Coal Co.	Shawnee .....	Prinley .....	.....
Teal, H. F.....	R. D. 2, New Lexington.	Teal .....	New Lexington
Tedrow Bros.....	Crooksville .....	.....	Crooksville
Thompson Coal Co., Henry.	New Straitsville.....	Troy No. 2.....	New Straitsville
Thompson Coal Co., The J. E. ....	Somerset .....	Schmeltzer .....	Somerset
Thorn Hill Coal Co.....	Nelsonville .....	.....	McCuneville
Troy Coal Co.....	New Straitsville.....	.....	New Straitsville
Twin Hill Mining Co.....	1705 Dime Bank Bldg., Detroit, Mich.....	Twin Hill.....	.....
Uhrig Coal Co., The.....	510 Schultz Bldg., Co- lumbus .....	.....	.....
Underwood, Jesse R.....	New Lexington.....	.....	New Lexington
Upson Coal & Mining Co..	391 Hudson Ave., Newark	Dixie .....	Dixie
Vernon Coal Co.....	New Straitsville.....	.....	.....
Wheeler & Mason Coal Co.	Brunson Bldg., Columbus.	Saltillo .....	Saltillo
Wile Coal Co.....	Main St., Shawnee.....	.....	Shawnee
Williams, D. A.....	New Straitsville.....	.....	New Straitsville
Wingate, O. W.....	China St., Crooksville...	.....	Crooksville
Zanesville Coal Co.....	229 N. 4th St., Zanesville.	Keystone No. 5. Keystone No. 6.	Crooksville McLuney

## PORTAGE COUNTY

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Atwater Coal Co.....	Atwater .....	No. 1.....	Atwater
Hutson Coal Co.....	911 Park Bldg., Cleveland.	No. 4.....	Deerfield
		No. 10.....	

## SCIOTO COUNTY

Carlyle-Fabold Co.....	Portsmouth .....	Carlyle Shale....	
Howard, B. G.....	Scioto Furnace.....		
Lyra Mining Co.....	Huntington, W. Va.....		Lyra
Moore, Henry C.....	Scioto Furnace.....		
Mosebarger, W. J.....	South Webster.....		South Webster
Pastor & Lambert.....	Oak Hill.....		
Poetker, John.....	South Webster.....	Bower .....	South Webster
Scioto Mining Co.....	415 Robson-Pritchard Bldg., Huntington, W. Va. ....	Scioto .....	Huntington, W. Va.
South Webster Fire Brick Co. ....	South Webster.....	South Webster..	

## STARK COUNTY

Adamson Mche. Co.....	Akron .....	Shaffer .....	Aultman
Agricultural & Commercial Lime Co.....	Renkert Bldg., Canton....	A. & C. Lime....	North Industry
Anthony, G.....	Paris .....	Anthony .....	Paris
Arntz, Chas. W.....	North Industry.....		North Industry
Barber Mining & Fertilizer Co., O. C.....	204 Vicary Bldg., Canton.	Fox Run.....	North Industry
		Pike Run No. 1	
		Pike Run No. 2	
Battle Ax Coal Co.....	405 McClymonds Bldg., Massillon .....		
Beach City Coal Co.....	Beach City.....	Muskof .....	Beach City
Bernhardt Coal & Lime- stone Co.....	North Canton.....	North Canton...	North Canton
Bingham & Williams Bros..	Canal Fulton.....	Hoover .....	
Blackledge, R. O.....	Robertsville .....	Blackledge .....	
Blaugh, E. O.....	R. D. 1, North Industry..	Blaugh .....	North Industry
Bollinger Bros. Coal Co...	Osnaburg .....		Osnaburg
Bollinger Coal Co.....	R. D. 1, Osnaburg.....	Bollinger .....	Osnaburg
Borrick, Rhodes.....	Osnaburg .....	Daum Mine....	Osnaburg
Bosley, John.....	North Lawrence.....		
Christman - Stoner Mining Co. ....	416 McClymonds Bldg., Massillon .....	No. 5.....	Justus
Davis, W. L. & Carl O., Willis, G. B., Canteel, G. B. ....	Canton .....		
Dueber Heights Coal Co...	Canton .....		
Eckinger, W. H.....	R. D. 5, Canton.....		R. D. 5, Canton

## STARK COUNTY — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Economy Coal Co.....	Canal Fulton.....		Canal Fulton
Edgefield Coal Co.....	21 Arcade Bldg., Canton..		Canton
Ely, Robert.....	Paris .....	Houston .....	Paris
Fuel Supply Co., The.....	806 3rd St., Canton.....	Sponsellor .....	
Fulton Coal Co.....	Canal Fulton.....	Stucker .....	
Garner, H. R.....	R. D. 2, Osnaburg.....	Garner .....	Osnaburg
Greentown Coal Co.....	Peoples Savs. & Trust Bldg., Akron.....	Shotmacher .....	Greentown
Haidet & Son, Peter.....	North Industry.....		North Industry
Haubert, Henry.....	R. D. 1, Osnaburg.....		Osnaburg
Hazen, O. T.....	Alliance .....		Alliance
Hinderer, J. L. & E. E....	1527 Maple Ave., Canton..	Hinderer .....	
Howells & Fox.....	500 W. Main St., Massil- lon .....	Willow Grove... ..	Massillon
Janson, G. E.....	Waynesburg .....		
Keim Brick & Tile Co....	Louisville .....	Keim No. 1....	Osnaburg
Kienzl, Chas.....	R. D. 1, East Sparta.....		East Sparta
Koehler, C. E.....	Magnolia .....		Magnolia
Kutcher, Earl.....	Beach City.....		Beach City
Lehmiller Bros. & W. H. Kitzmiller .....	R. D. 5, Canton.....	J. G. Lehmiller..	Canton
Lehmiller, Wm.....	North Industry.....	Sunnyside .....	North Industry
Lexington Coal Co.....	Alliance .....	Lexington .....	Alliance
Louisville Brick & Tile Co.	Louisville .....	McGinty .....	Louisville
McClelland Bros.....	R. D. 2, Osnaburg.....		Osnaburg
Massillon City Coal Co....	Massillon .....	Massillon City Mine No. 6....	Massillon
Massillon Coal Mining Co.	1300 Leader-News Bldg., Cleveland .....	No. 26..... Charlotte 27.... No. 24.....	
Massillon Stone & Fire Brick .....	Massillon .....		
Miller, Herman .....	R. F. D. 3, Navarre.....	Miller .....	Navarre
Milton Coal Co.....	311 City Nat'l Bk. Bldg., Canton .....	Milton .....	North Industry.
Mizer & Summers.....	Waynesburg .....		
Morgan Mining Co.....	Francis Ave., and Na- varre Rd., Canton.....	Young .....	North Industry
Myers & Wickersham.....	Moultrie .....	Sommerville ...	Moultrie
Nat'l Fire Proofing Co....	Fulton Bldg., Pittsburgh, Pa. ....	Waynesburg No. 3 .....	Waynesburg
		N. F. P. Co. No. 1	Osnaburg
New Urban Hill Coal Co, The .....	North Lawrence .....	Urban Hill.....	
Old Minglewood Mining Co. ....	9 E. Main St., Massillon.		
Plaskett, John .....	North Industry .....		North Industry
Pocock Coal Co., The....	Massillon .....	Pocock No. 4....	

## STARK COUNTY—Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Quality Coal Co., The.....	Canal Fulton .....	.....	.....
Raugh, J. M.....	R. D. 1, Osnaburg.....	.....	Osnaburg
Reed, J. B.....	R. D. 1, Waynesburg.....	Reed .....	.....
Renier, O. E.....	R. D. 1, Osnaburg.....	.....	Osnaburg
Riehl, Wm. ....	927 Smith S. W., Canton. ....	.....	.....
Riesterer, Nikc .....	R. D. 2, Beach City.....	Hazard .....	.....
Rose-Brook Coal Co.....	Canton .....	Rose Brook.....	.....
Rose Hill Coal Co.....	Navarre .....	Rose Hill.....	Navarre
Rough, John .....	R. D. 1, Osnaburg.....	.....	Osnaburg
Sausser, J. M.....	Osnaburg .....	Sausser .....	Osnaburg
Savage, Thomas .....	Justus .....	Grossklaus ....	Justus
Schweitzer, Wm. ....	R. D. 1, Osnaburg.....	.....	Osnaburg
Sell, Jacob .....	R. D. 2, Osnaburg.....	.....	Osnaburg
Shaffer, Elmer .....	R. D. 3, Louisville.....	Harrisburg ....	Louisville
Slutz, Harry .....	321 N. Cherry St., Can- ton .....	Ake Mine.....	Canton
Smith Bros. ....	Beach City .....	.....	Beach City
Sonnhalter, A. F.....	709 Harriet St. N. W., Canton .....	Sonnhalter No. 1 .....	Canton
Speakman, Millard .....	R. D. 1, Paris.....	.....	Paris
Stark Brick Co.....	308 Daily News Bldg., Canton .....	.....	Osnaburg
Stark-Summit Coal Co....	East Sparta .....	.....	East Sparta
Thoma & Zumkehr.....	Moultrie .....	.....	.....
Thomas, E. J.....	East Sparta .....	.....	East Sparta
United States Roofing Tile Ca. ....	Parkersburgh, W. Va....	.....	East Sparta
Urmson, Frank .....	418 W. State St., Alliance.	West Main St. Coal Mine.....	Alliance
Waynesburg Coal Co.....	Waynesburg .....	Waynesburg ....	Waynesburg
Westover & Patton.....	Alliance .....	.....	.....
Whitace-Greer Fire Proofing Co.....	Waynesburg .....	Whitacre No. 5} Whitacre No. 6}	Waynesburg
Wise Bros. ....	1132 11th St. N. W., Canton .....	No. 2.....	Canton
Wolf, Marian .....	R. D. 2, Osnaburg.....	Bixby .....	Osnaburg
Wymer Bros. ....	R. D. 4, Canton.....	Kitzmiller ....	Canton
Yarger & Eversole.....	R. D. 1, North Industry..	.....	.....
Yohe, Chas. H.....	R. D. 5, Canton.....	Yohe .....	Canton

## SUMMIT COUNTY

## Beechwood-Massillon Coal

Co. ....	Rockefeller Bldg., Cleve- land .....	Beechwood .....	Clinton
Clark, M. B.....	Aultman .....	Bernhardt No. 1 .....	.....
Daily, C. R.....	R. D. 37 Clinton.....	.....	R. D. 37, Clinton
Daily, C. R.....	43 Casterton Ave., Akron.	.....	Akron
Hauer, Adolph .....	689 S. Main St., Akron...	.....	.....

## SUMMIT — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Myers, Theo. ....	New Berlin .....	Wise Mine No. 1 .....	Aultman
		Wise Mine No. 2 .....	
Thomas, Morgan .....	Tallmadge .....	Ray Mine.....	
Weston Road Coal Co....	44 Cook St., Akron.....		Tallmadge
Williams, Howell .....	Canal Fulton .....	C. R. ....	

## TRUMBULL COUNTY

Clark, E. W.....	R. D. 2, Tyrrell.....	Clark .....	Tyrrell
Lunn, Jos. W.....	R. D. 57, Sharon.....	Lunn Bros.....	Sharon

## TUSCARAWAS COUNTY

Abbuhl, W. O.....	R. D. 1, Uhrichsville....	Park Valley.....	Uhrichsville
Akron Coal Co.....	Akron Sav. & Loan Bldg., Akron .....	Beaver Dam.....	Roswell
		Silver Creek....	Wainright
Alfred and Fred Meissner, Harry .....	154 Vine St., New Phila- delphia .....	Meissner's .....	New Philadelphia
Alphons, Custodis Chimney Construction Co. ....	95 Nassau St., New York City .....		Dennison
American Sewer Pipe Co..	15 Broad St., Akron.....	Diamond .....	Uhrichsville
Anderson & Lewis.....	Uhrichsville .....		Uhrichsville
Andreas Coal Co.....	127 South Broadway, New Philadelphia .....		New Philadelphia
Arnold Co. ....	114 S. Broadway, New Philadelphia .....	Arnold .....	New Philadelphia
Banks Bros. Coal Co.....	Somerdale .....	Central Valley No. 1.....	Somerdale
Banks & Bros., S. H.....	New Philadelphia .....	John Dunn.....	New Philadelphia
Beans, C. A.....	Bergholz .....		
Beans, G. H.....	Barnhill .....	Bumblebee .....	Barnhill
Beans & Williams.....	Barnhill .....	Brock Hill No. 1.	Barnhill
Belden Face Brick Co....	Port Washington .....	Enterprise .....	Port Washington
Benjamin, G. O.....	R. D. 1, Dennison .....		
Best, George T.....	R. D. 1, Zanesville.....	Best .....	
Biery, Chas. S.....	S. Union St., Alliance....		
Bowling Coal & Mining Co.	Box 627, Dennison .....	Bowling .....	Dennison
Bowling & Stroup.....	New Philadelphia .....	Plainview .....	New Philadelphia
Breyer & Winkler.....	R. D. 2, New Philadelphia	The Horn.....	New Philadelphia
Brown Coal Mining Co....	408 Martin Bldg., Canton.		
Brown Hollow Coal Co...	Somerdale .....	Brown Hollow..	Somerdale
Brown, M. R. & R. G.....	426 Beaver Ave., New Philadelphia .....	Brown .....	New Philadelphia

## TUSCARAWAS COUNTC — Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Bucher Bros. Coal Co.....	E. 3rd St., Uhrichsville...	Ridge Road.....	New Philadelphia
Buckeye Fire Clay Co.....	212 Chestnut St., New Philadelphia .....	Buckeye .....	Uhrichsville
Burgess, George .....	R. D. 3, Dover.....	.....	.....
Burgess, James & Addison.	Dover .....	No. 3.....	.....
Burgess & Brick.....	R. D. 3, Dover.....	Burgess .....	Dover
Canton Drop Forging & Mfg. Co. ....	Odd Row, Canton.....	Forge .....	New Philadelphia
Center Valley Coal Co....	Somerdale .....	Center Valley...	Somerdale
Cleveland Canton Coal Co.	357 Leader-News Bldg., Cleveland .....	C Mine.....	Roswell
Cole, H. E.....	Midvale .....	Scott .....	.....
Croniser, John D.....	Uhrichsville .....	.....	Uhrichsville
Dennison Sewer Pipe Co..	Dennison .....	Dennison Coal...	Dennison
Dover Fire Brick Co.....	Strasburg .....	.....	Strasburg
Edwards, Isaac .....	New Philadelphia .....	Big Mine.....	New Philadelphia
Edwards & Son Coal Co...	1209 N. Water St., Uhrichsville .....	.....	Uhrichsville
Erwin, John .....	R. D. 1, Dover.....	Erwin .....	Dover
Euga, F. L.....	Newcomerstown .....	Myrtle Mine...	Newcomerstown
Eureka Coal Co.....	135 Beaver Ave., New Philadelphia .....	.....	.....
Evans Clay Mfg. Co.....	Uhrichsville .....	.....	Uhrichsville
Federal Clay Product Co..	Mineral City .....	Factory No. 1...	Mineral City
Finzer Bros. Clay Co.....	Sugarcreek .....	.....	Sugarcreek
Foote, Wm. ....	208 W. 1st St., Uhrichs- ville .....	Hutson .....	Uhrichsville
Franklin Coal Co.....	Barnhill .....	Brock Hill No. 2.	.....
Geckler Bros. ....	R. D. 2, East Sparta.....	Geckler .....	East Sparta
Gibler, J. J.....	Box 24, Sandyville .....	.....	Sandyville
Glass & Thomas.....	R. D. 4, New Philadel- phia .....	Glass .....	New Philadelphia
Gnaden Mining Co.....	Uhrichsville .....	.....	Gnadenhutten
Goshen Central Coal Co...	15 N. Erie St., Massillon.	.....	Tuscarawas
Goshen Ridge Coal Co....	229 N. 6th St., New Phil- adelphia .....	No. 1.....	New Philadelphia
		No. 2.....	
Guisisnger & Eggan Bros..	332 N. 3d St., New Phila- delphia .....	.....	.....
Guy, L. E.....	Dell Roy .....	.....	.....
Hale & McClean.....	R. D. 3, New Philadelphia	Jack Rabbit....	New Philadelphia
Harbison-Walker Refrac- tories Co. ....	1800 Farmers Bk. Bldg., Pittsburgh, Pa. ....	Harwalk Coal...	Harwalk
Harding, Robert S.....	New Philadelphia .....	New Castle Coal Co. ....	New Philadelphia
Hartz Coal Co.....	Dover .....	.....	Dover
Hawkins, B. F.....	Main St., Barnhill.....	Gin Sang.....	Barnhill
Hensel Coal Co.....	17½ W. High St., New Philadelphia .....	No. 2.....	.....



## TUSCARAWAS COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Horger-Heldt Coal Co....	127 S. Broadway, New Philadelphia .....	D Mine..... G Mine..... H Mine.....	New Philadelphia
Indian Hill Coal Co.....	758 Rockefeller Bldg., Cleveland .....	.....	
Kimbolton Coal Mining Co.	404-5 Park Bldg., Cleveland .....	Buckhorn .....	
		Rice .....	Newcomerstown
Klein-Moore Coal Co.....	548 W. Ray St., New Philadelphia .....	.....	Post Boy
		.....	New Philadelphia
Larrison Coal Co.....	Otsego .....	.....	
Laughlin Coal Co.....	Mineral City .....	Laughlin .....	Mineral City
Leonard, W. A.....	Somerdale .....	Central Valley...	
Lewis, Clifford R.....	154 N. High St., New Philadelphia .....	.....	
Linaham, John .....	Dennison .....	Dennison Sewer Pipe .....	Dennison
Loveday & Son, Wm.....	R. D. 3, New Philadelphia .....	Keller's Grove...	New Philadelphia
Ludlam, Andy .....	Mineral City .....	Peacock .....	Mineral City
Lyons Bros. ....	Wolf .....	.....	Wolf
McMann, W. A.....	Midvale .....	.....	Midvale
McMillen & Co., A. J.....	New Philadelphia .....	.....	
Markley, George J.....	Mineral City .....	Huff Run No. 1 Silver Ash..... Acme No. 2....	Mineral City
		.....	
		.....	
Mason, John .....	Dover .....	.....	Dover
Massillon-uTcarawas Coal Co. ....	Massillon .....	Central Valley...	R. D. 2, Dover
Mathias, John A.....	347 N. 7th St., New Philadelphia .....	Pleasant Hill...	New Philadelphia
Midvale Coal Co.....	Midvale .....	Midvale No. 4.. Rosebud No. 3..	Midvale
		.....	
Midvale-Goshen Coal Co..	1507 Union Nat'l Bk. Bldg., Cleveland.....	Wainwright No. 6..... Wainwright No. 7.....	Wainwright
		.....	
Miller & Pyle Coal Co....	Somerdale .....	Miller & Pyle No. 1..... Miller & Pyle No. 2.....	Somerdale
		.....	
Moore & Sons, A. C.....	New Cumberland .....	.....	
Morris & Riley Coal Co...	R. D. 2, Uhrichsville.....	.....	
Mullins Coal Co., James..	403 Martin Bldg., Canton.	Mullins No. 2...	New Philadelphia
Nat'l Fire Brick Co.....	1209 Rockefeller Bldg., Cleveland .....	.....	Tuscarawas
Naber Coal Co., The.....	Midvale .....	.....	
New Castle Coal & Mining Co. ....	New Philadelphia .....	.....	

## TUSCARAWAS COUNTY—Continued

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Newman & Blaser Co.....	Strasburg .....	Buckeye .....	
Newport Coal & Mining Co. ....	117½ W. High St., New Philadelphia .....		Tracey
Newton & Gibson Bros....	238 Park Ave., New Philadelphia .....	Meyers .....	
Novelty Brick & Coal Co..	Clinton Bldg., Columbus..		Newcomerstown
Ohler & Watkins.....	Barnhill .....	Royal Goshen...	
Old Town Coal Co.....	Public Sq., New Philadelphia .....	No. 1.....	New Philadelphia
Opphile, Wm. ....	Newcomerstown .....	Havers .....	
P. P. O. Mining Co.....	Barnhill .....		
Page Coal Co., T. B.....	R. D. 1, Uhrichsville....		
Park Valley Coal Co.....	R. D. 1, Uhrichsville....	Park Valley....	
Plain View Coal Co.....	New Philadelphia .....		
Plotts & Lint.....	Stillwater .....	Furney .....	
Reeves Coal Co.....	New Philadelphia .....	Reeves No. 2....	New Philadelphia
Reeves Mfg. Co.....	Iron Ave., Dover.....	No. 1.....	Dover
Reiser Coal Co., A. W....	New Philadelphia .....		
Ridgeway & Mastralli Coal Co. ....	Uhrichsville .....		
Riggle, H. M.....	Port Washington .....		
Robinson Clay Product Co.	1010 E. Market St., Akron .....		
Robinson & Sons Sewer Pipe Co. ....	Uhrichsville .....		Uhrichsville
Ross Clay Products Co....	Uhrichsville .....		Uhrichsville
Ruegsegger, H. H.....	Beach City .....	Sunny Side.....	Beach City
Rufenacht & Reiser.....	New Philadelphia .....	Black Diamond..	
Rutledge Coal Co., R. W..	Midvale .....	East Port.....	Midvale
Satler, Edw. ....	Mineral City .....		
Sattler, Fred. ....	R. D. 1, Mineral City....		Mineral City
Scalley, L. ....	Barnhill .....		
Schindler, H. A.....	Tuscarawas .....	River Side.....	Tuscarawas
Schneider, Herman C....	New Philadelphia .....	Goshen .....	New Philadelphia
Schneider, Wm. ....	R. D. 3, New Philadelphia .....		New Philadelphia
Schott & Lise.....	Massillon .....		
Scott Coal Co.....	Midvale .....	B. Mine.....	Midvale
Scott, W. O.....	Uhrichsville .....		Uhrichsville
Seibold & Quinn.....	New Philadelphia .....	American Eagle.	New Philadelphia
Sells, Elmer .....	Newcomerstown .....	Sells .....	Newcomerstown
Sharon Coal Co., Ltd.....	128½ N. Broadway, New Philadelphia .....		Tuscarawas
Schepfer & Moomaw Bros.	Sugarcreek .....		Sugarcreek
Shipton, C. R.....	Uhrichsville .....		Uhrichsville
Simon, Richard .....	R. D. 2, Uhrichsville....		
Smith Coal Co.....	Box 224, New Philadelphia .....		New Philadelphia
Smith & Schulte.....	Uhrichsville .....	Naber .....	
Snyder & Stevens.....	641 W. Fair St., New Philadelphia .....	Reeves No. 1....	
Southern-Goshen Coal Co.	Stillwater .....		

## TUSCARAWAS COUNTY — Concluded

<i>Name.</i>	<i>Address.</i>	<i>Mine Name.</i>	<i>Nearest Postoffice.</i>
Staffstead Coal Co.....	128½ N. Broadway, New Philadelphia .....	.....	New Philadelphia
Steam Pit Coal Co., The...	Public Sq., New Philadelphia .....	.....	.....
Steinbaugh, Edw. R.....	536 S. 3d St., New Philadelphia .....	.....	.....
Stempfly & Murphy.....	New Philadelphia .....	Stempfly .....	.....
Stevens & D. O. Vankirk, James .....	Mineral City .....	.....	Mineral City
Stevens & Snyder.....	New Philadelphia .....	.....	.....
Strong, W. G.....	Mineral City .....	Poccock .....	.....
Studer, Wm. ....	Bolivar .....	Studer .....	.....
Tabor Coal Co., The.....	New Philadelphia .....	.....	.....
Tuscarawas Coal Co.....	New Philadelphia .....	Shamrock .....	.....
Twin City Coal Co.....	758 Rockefeller Bldg., Cleveland .....	.....	Uhrichsville
Uhrichsville Clay Co.....	Uhrichsville .....	.....	Uhrichsville
U. S. Clay Products Co....	215½ Water St., Uhrichsville .....	.....	Gnadenhutzen
U. S. Stoneware Co.....	Akron .....	May .....	East Sparta
Wainwright Coal Co.....	Cleveland .....	Wainwright No. 7 .....	.....
Weeks Lumber Co., F. H. .	67 E. Thornton St., Akron .....	.....	New Philadelphia
Whitehouse, Job .....	R. D. 11, Maple Grove... ..	.....	Uhrichsville
Wilcox Coal Co.....	Nantucket Bldg., Akron.. ..	.....	Magnolia
Winkler Coal Co.....	132 S. 3d St., New Philadelphia .....	Winkler No. 1.. ..	.....
Wolf-Lanning Clay Co....	Dennison .....	.....	Dennison

## VINTON COUNTY

Alice Coal Co.....	Zaleski .....	.....	Zaleski
Ankron Coal Co., R. H....	Dundas .....	Dundas Hill.....	Dundas
Atlas Coal Mining Co....	Callahan Power Bldg., Dayton .....	.....	.....
Black Hawk Coal Co.....	Hawks .....	Black Hawk.....	Hawks
Campbell Coal Co.....	R. D. 8, Athens.....	.....	Hawks
Carpenter, P. J.....	R. D. 4, Wellston.....	.....	Hawks
Cavanaugh & Bighouse...	Zaleski .....	Cardiff No. 4....	Zaleski
Clifton Coal Co.....	Zaleski .....	Clifton .....	Zaleski
Dickson, J. T.....	McArthur .....	.....	McArthur
Downard, Jas. ....	McArthur .....	.....	.....
Driscoll, Wm. J.....	Zaleski .....	.....	.....
Elk Fork Coal Co.....	E. Broadway, Wellston... ..	Elk Fork No. 1.. ..	McArthur
Elko Colliery Co., The...	Wellston .....	.....	.....
Fathrill, E. ....	Radcliffe .....	.....	Radcliffe
Fierbaugh, O. S.....	Athens .....	Hope Station Mine .....	Zaleski
Fulton Brick Mining Co...	McArthur .....	.....	.....

